

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Dana Point Harbor](#)
Water Body ID: CAB9011400020010831141600
Water Body Type: Bay & Harbor

DECISION ID	43226	Region 9
Dana Point Harbor		

Pollutant: Copper
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Marinas and Recreational Boating | Source Unknown | Unknown Nonpoint Source | Urban Runoff/Storm Sewers
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant in water. One line of evidence is available for this pollutant in sediment. Forty-five of the ninety-eight water samples exceed the CRITERIA, eleven of the nineteen sediment samples exceed the CRITERIA, and three of the twenty-five sediment toxicity samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-five of ninety-eight water samples exceeded the CRITERIA and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43226, Copper	Region 9
Dana Point Harbor	

LOE ID: 26494
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Five water samples were collected at single water level from five stations. All samples exceed the CTR values for acute and chronic water quality criterion.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06 Regional Harbor Monitoring Program Pilot Project 2006-07
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. From the Basin Plan on pesticides, no individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb (U.S. EPA, 2000).
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Three stations (D1M, D2M, and D3M) were sampled in 2005 and two stations (D106M and D206M) in 2006 from Dana Point Harbor.
Temporal Representation:	Samples were collected on August 15, 2005 and August 21, 2006.
Environmental Conditions:	
QAPP Information:	Weston Solutions. 2005. Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project. Prepared for the Port of San Diego, City of San Diego, City of Oceanside, and County of Orange.
QAPP Information Reference(s):	Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project.

Line of Evidence (LOE) for Decision ID 43226, Copper
Dana Point Harbor

Region 9

LOE ID:	26493
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The mean of the 3 samples from the five stations exceed the acute or chronic water quality objective
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
	From the Basin Plan on pesticides, no individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb (U.S. EPA, 2000).
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA
Spatial Representation:	Five stations were sampled in Dana Point Harbor. Each station was sampled at upper, mid and lower levels within the water column to total of three samples.
Temporal Representation:	All samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	SCCWRP. 2005. Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. Southern California Coastal Water Research Project. August 2005.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

Line of Evidence (LOE) for Decision ID 43226, Copper
Dana Point Harbor

Region 9

LOE ID:	73495
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	33
Number of Exceedances:	9
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirty-three samples were collected to test for toxicity. Nine of the 33 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass and survival and Eohaustorius survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations DAPTDC, DAPTEB, DAPTLB, DAPTLR, and

Temporal Representation:	DAPTWB -Dana Point Harbor.
Environmental Conditions:	The samples were collected from June 2006 to June 2008.
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43226, Copper

Region 9

Dana Point Harbor

LOE ID:	73481
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	45
Number of Exceedances:	16
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Sixteen of 45 samples exceeded the water quality objective for copper. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 31.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in saltwater for copper at 3.1 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected quarterly starting in Fall of 2006 through January of 2008.
Temporal Representation:	Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43226, Copper

Region 9

Dana Point Harbor

LOE ID:	73496
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Marine Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-five samples were collected to test for sediment toxicity. Three of the 25 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Eohaustorius Survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations DAPTDC, DAPTEB, DAPTLB, DAPTLR, and DAPTWB -Dana Point Harbor.
Temporal Representation:	The samples were collected from June 2006 to June 2008.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43226, Copper

Region 9

Dana Point Harbor

LOE ID:	26488
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Five sediment samples were collected in Dana Point Harbor. All five samples exceed the ERL for copper. One of the five samples exceed the ERM.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin, 2007 (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Effects Range Median (ERM) and Effects Range Low (ERL) for copper (Long, et, al., 1995).

Guideline Reference:	The ERM for copper is 270 ug/g dry weight and the ERL is 34 ug/g dry weight Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Samples were collected both at West Basin Channel and East Basin Channel of Dana Point Harbor
Temporal Representation:	Samples were collected on August 2005 and 2006.
Environmental Conditions:	
QAPP Information:	Weston Solutions. 2005. Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project. Prepared for the Port of San Diego, City of San Diego, City of Oceanside, and County of Orange.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43226, Copper
Dana Point Harbor

Region 9

LOE ID:	26483
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	14
Number of Exceedances:	6
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Eight samples collected in the West Basin Channel (Area B) and six samples collected in the East Basin Channel (Area C) were used for the analysis. Two of the eight samples exceed the ERL for copper in Area B and four of the six samples collected in area C exceed the ERL for copper. None of the 14 samples exceed the ERM. The composite sample for Area C also exceeded the ERL.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin, 2007 (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Effects Range Median (ERM) and Effects Range Low (ERL) for copper (Long, et, al., 1995). The ERM for copper is 270 ug/g dry weight and the ERL is 34 ug/g dry weight
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Samples were collected both at West Basin Channel and East Basin Channel of Dana Point Harbor
Temporal Representation:	Samples were collected on August 23, 2006.
Environmental Conditions:	
QAPP Information:	Kinnetic Laboratories conducts all activities in accordance with formal QA/QC procedures.
QAPP Information Reference(s):	

DECISION ID 42684

Region 9

Dana Point Harbor

Pollutant: Toxicity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess pollutant. Fourteen of the forty water samples and three of the twenty-five sediment samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of forty water samples and three of twenty-five sediment samples exceeded the GUIDELINE and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42684, Toxicity Dana Point Harbor

Region 9

LOE ID:	73496
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-five samples were collected to test for sediment toxicity. Three of the 25 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Eohaustorius Survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the

control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation:

The samples were collected at stations DAPTDC, DAPTEB, DAPTLB, DAPTLR, and DAPTWB -Dana Point Harbor.

Temporal Representation:

The samples were collected from June 2006 to June 2008.

Environmental Conditions:

QAPP Information:

The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 42684, Toxicity
Dana Point Harbor**

Region 9

LOE ID: 26499

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Marine Habitat

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type:

Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality:

Toxicity tests were conducted using composite water column samples on the mussel *Mytilus galloprovincialis*, mysid shrimp *Mysidopsis bahia*, and a fish *Menidia beryllina*. Sediment/water samples were composited and tested from Areas B and Area C. Toxicity was not observed at from either of the Areas.

Data Reference:

[Regional Harbor Monitoring Program Pilot Project 2005-06](#)
[Regional Harbor Monitoring Program Pilot Project 2006-07](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

From the Basin Plan on pesticides, no individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The threshold for toxicity was a No Effect Concentration (NOEC) less than 100 %.

Guideline Reference:

[Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483](#)

Spatial Representation:

Samples were collected both at west basin channel and east basin channel of Dana Point Harbor

Temporal Representation:

All samples were collected on August 23, 2006.

Environmental Conditions:

QAPP Information:

Kinnetic Laboratories conducts all activities in accordance with formal QA/QC procedures.

QAPP Information Reference(s):

[County of Orange. Dredge Material Evaluation, Dana Point Harbor Maintenance Dredging](#)

Line of Evidence (LOE) for Decision ID 42684, Toxicity

Region 9

Dana Point Harbor

LOE ID:	73495
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	33
Number of Exceedances:	9
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirty-three samples were collected to test for toxicity. Nine of the 33 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass and survival and Eohaustorius survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations DAPTDC, DAPTEB, DAPTLB, DAPTLR, and DAPTWB -Dana Point Harbor.
Temporal Representation:	The samples were collected from June 2006 to June 2008.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42684, Toxicity

Region 9

Dana Point Harbor

LOE ID:	26498
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Five upper water column water samples were tested for toxicity on mussel <i>Mytilus galloprovincialis</i> . Toxicity was observed at all five sampling locations.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.</p> <p>From the Basin Plan on pesticides, no individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The threshold for toxicity was less than 80% development relative to the control test species (Schiff et al, 2006).
Guideline Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
Spatial Representation:	Five stations were sampled in Dana Point Harbor.
Temporal Representation:	All samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	SCCWRP. 2005. Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. Southern California Coastal Water Research Project. August 2005.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

Line of Evidence (LOE) for Decision ID 42684, Toxicity
Dana Point Harbor

Region 9

LOE ID:	26495
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Five sediment samples were tested for toxicity using amphipod Eohaustorius estuaris. Toxicity was not observed at all five sampling locations.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06 Regional Harbor Monitoring Program Pilot Project 2006-07
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007). From the Basin Plan on pesticides, no individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The threshold for toxicity was less than 80% survival relative to the control test species

Guideline Reference: (Weston, 2006).
[Regional Harbor Monitoring Program Pilot Project 2005-06](#)

Spatial Representation: Five stations were sampled in Dana Point Harbor.

Temporal Representation: Samples were collected on August 31, 2005 and August 21, 2006.

Environmental Conditions:

QAPP Information: Weston Solutions. 2005. Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project. Prepared for the Port of San Diego, City of San Diego, City of Oceanside, and County of Orange.

QAPP Information Reference(s): [Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project.](#)

DECISION ID	42746	Region 9
Dana Point Harbor		

Pollutant: Zinc

Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2027

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. Two of the 19 samples exceed the criteria for Zn in sediment for the protection of aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 19 samples exceed the criteria for Zn in sediment for the protection of aquatic life and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42746, Zinc	Region 9
Dana Point Harbor	

LOE ID: 73497

Pollutant: Zinc

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of the 45 samples exceeded the water quality objective for zinc. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CTR Criterion Continuous Concentration (4-Day Average) of Zinc is 81 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected quarterly starting in Fall of 2006 through January of 2008.
Temporal Representation:	Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42746, Zinc

Region 9

Dana Point Harbor

LOE ID:	26489
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Five samples were collected in the Dana Point harbor. Two of the five samples exceed the ERL for zinc. None of the samples exceed the ERM.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin, 2007 (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Effects Range Median (ERM) and Effects Range Low (ERL) for zinc (Long, et, al., 1995). The ERM for zinc is 410 & 956ug/g dry weight and the ERL is 150 & 956ug/g dry weight
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Samples were collected both at West Basin Channel and East Basin Channel of Dana Point

Temporal Representation:	Harbor
Environmental Conditions:	Samples were collected on August 2005 and 2006.
QAPP Information:	Kinnetic Laboratories conducts all activities in accordance with formal QA/QC procedures.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42746, Zinc

Region 9

Dana Point Harbor

LOE ID:	26490
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Eight samples collected in the West Basin Channel (Area B) and six samples collected from the East Basin Channel (Area C). None of the 14 samples exceed the ERM or ERL.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin, 2007 (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Effects Range Median (ERM) and Effects Range Low (ERL) for zinc (Long, et, al., 1995). The ERM for zinc is 410 µg/g dry weight and the ERL is 150 µg/g dry weight
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Samples were collected both at West Basin Channel and East Basin Channel of Dana Point Harbor
Temporal Representation:	Samples were collected on August 23, 2006.
Environmental Conditions:	
QAPP Information:	Kinnetic Laboratories conducts all activities in accordance with formal QA/QC procedures.
QAPP Information Reference(s):	

DECISION ID

48389

Region 9

Dana Point Harbor

Pollutant:	Ammonia (Unionized)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 24

samples exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 24 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48389, Ammonia (Unionized)
Dana Point Harbor**

Region 9

LOE ID:	73486
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 24 samples exceeded the water quality objective for unionized ammonia. Data were reported as as total ammonia as nitrogen and were converted to unionized ammonia as nitrogen before being compared with the objective. Samples collected within a seven-day period and within 200 meters were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Dana Cove/Ocean Institute, East Basin, Near Launch Ramp, Dana Point Harbor Shipyard, and West Basin. Samples from Near Launch Ramp were within 200 meters of samples from Dana Point Harbor Shipyard.
Temporal Representation:	Samples were collected from September 2006 to June 2008.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

48400

Region 9

Dana Point Harbor

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 36 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48400, Arsenic

Region 9

Dana Point Harbor

LOE ID: 73478

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 36
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the 36 samples exceeded the water quality objective for arsenic. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 31.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average)

Guideline Reference:	to protect aquatic life in saltwater for arsenic at 36 ug/L. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected quarterly starting in Fall of 2006 through January of 2008.
Temporal Representation:	Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 48401		Region 9
Dana Point Harbor		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 36 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 36 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.	

Line of Evidence (LOE) for Decision ID 48401, Cadmium		Region 9
Dana Point Harbor		
LOE ID:	73479	
Pollutant:	Cadmium	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	
Beneficial Use:	Marine Habitat	
Number of Samples:	36	

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 36 samples exceeded the water quality objective for cadmium. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 31.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in saltwater for cadmium at 9.3 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected quarterly starting in Fall of 2006 through January of 2008.
Temporal Representation:	Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 48402 Region 9	
Dana Point Harbor	
Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 36 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 36 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48402, Chlorpyrifos**Region 9****Dana Point Harbor**

LOE ID:	73480
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the thirty six samples exceeded the Criteria Continuous Concentration for Chlorpyrifos of 9 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from site DAPTDC, DAPTWB, DAPTEB, DAPTLR, DAPTLB in Dana Point Harbor.
Temporal Representation:	Samples were collected in September 2006; June, September and December 2007; and January 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID**48404****Region 9****Dana Point Harbor**

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 36 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48404, Diazinon
Dana Point Harbor**

Region 9

LOE ID:	73482
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the thirty six samples exceeded the maximum concentration for Diazinon criteria of 820.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Samples were collected from site DAPTEB, DAPTDC, DAPTWB, DAPTLR, DAPTLB in Dana Point Harbor.
Temporal Representation:	Samples were collected in September 2006; June, September and December 2007; and January 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	48407	Region 9
Dana Point Harbor		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 18 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of 18 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48407, Lead	Region 9
Dana Point Harbor	

LOE ID:	73483
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 18 samples exceeded the water quality objective for dissolved lead. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 31.36

Objective/Criterion Reference: (section 131.36 revised at 57 FR 60848, December 22, 1992).
[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in saltwater for lead at 8.1 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected quarterly starting in Fall of 2006 through January of 2008.

Temporal Representation: Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).

Environmental Conditions:

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	48408	Region 9
Dana Point Harbor		

Pollutant: Malathion

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 25 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 25 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48408, Malathion	Region 9
Dana Point Harbor	

LOE ID: 73484

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use:	Marine Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the twenty five samples exceeded the maximum concentration for Malathion of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected from site DAPTEB, DAPTDC, DAPTWB, DAPTLR, DAPTLB in Dana Point Harbor.
Temporal Representation:	Samples were collected in September 2006; June, September and December 2007; and January 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	48405	Region 9
Dana Point Harbor		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 36 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 36 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48405, Nickel
Dana Point Harbor**

Region 9

LOE ID:	73485
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 36 samples exceeded the water quality objective for nickel. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 5 ug/L to protect aquatic life in marine waters for nickel.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected quarterly starting in Fall of 2006 through January of 2008.
Temporal Representation:	Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 48406
Dana Point Harbor**

Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 36</p>

samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48406, Selenium
Dana Point Harbor**

Region 9

LOE ID:	73489
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 36 samples exceeded the water quality objective for selenium. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 31.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in saltwater for selenium at 71 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected quarterly starting in Fall of 2006 through January of 2008.
Temporal Representation:	Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 36 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48409, Silver	Region 9
Dana Point Harbor	

LOE ID:	73490
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 36 samples exceeded the water quality objective for silver. Samples collected from Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB) were collected within 200 meters and the analytical results were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 31.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The 6-Month Median value for Silver is 0.7Ug/L (California Ocean Plan, 2009)
Guideline Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Spatial Representation:	Samples were collected quarterly starting in Fall of 2006 through January of 2008.
Temporal Representation:	Samples were collected from within the Dana Point Harbor at four sample stations: Dana Cove / Ocean Institute (DAPTDC), East Basin (DAPTEB), Dana Point Harbor Shipyard (DAPTLR) and Near Launch Ramp (DAPTLB), and West Basin (DAPTWB).
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48411	Region 9
Dana Point Harbor		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 50 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 50 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48411, pH	Region 9
Dana Point Harbor	

LOE ID:	73488
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	50

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 50 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the DAPTDC, DAPTEB, DAPTLB, DAPTLR, and DAPTWB stations.
Temporal Representation:	Samples were collected approximately thrice semi-annually from September 2006 to September 2008.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	34003	Region 9
Dana Point Harbor		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. The data collected from 2006 to 2010 show that 256 of 561 geomean samples and 155 of 697 single samples exceed the water quality objective for total coliform for the protection of SHELL.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The data collected from 2006 to 2010 show that 256 of 561 geomean samples and 155 of 697 single samples exceed the water quality objective for total coliform for the protection of SHELL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria**Region 9****Dana Point Harbor**

LOE ID:	77702
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	156
Number of Exceedances:	88
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eighty eight of the 156 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Dana Point Harbor sites Pier and Pilgrim. The results at these sites were averaged because they are within 200 meters of each other.
Temporal Representation:	The samples were collected from April 2005 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria**Region 9****Dana Point Harbor**

LOE ID:	4450
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria Dana Point Harbor

Region 9

LOE ID:	77704
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	108
Number of Exceedances:	104
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One hundred and four of the 108 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Dana Point Harbor, site MDP18.
Temporal Representation:	The samples were collected from July 2006 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria Dana Point Harbor

Region 9

LOE ID:	77705
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	149
Number of Exceedances:	53
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Fifty three of the 149 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Dana Point Harbor, site Youth Dock.
Temporal Representation:	The samples were collected from April 2005 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria

Region 9

Dana Point Harbor

LOE ID:	77703
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	148
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eleven of the 148 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Dana Point Harbor site Fuel dock.
Temporal Representation:	The samples were collected from April 2005 to August 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria

Region 9

Dana Point Harbor

LOE ID: 73494

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 186
Number of Exceedances: 32

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Dana Point Harbor to determine beneficial use support and results are as follows: 32 of 186 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Dana Point Harbor was collected at 1 monitoring site [YOUTH DOCK]

Temporal Representation: Data was collected over the time period 4/21/2005-8/26/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria

Region 9

Dana Point Harbor

LOE ID: 73493

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 135
Number of Exceedances: 75

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed bw data for Dana Point Harbor to determine beneficial use support and results are as follows: 75 of 135 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dana Point Harbor was collected at 1 monitoring site [MDP18]
Temporal Representation:	Data was collected over the time period 7/20/2006-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria

Region 9

Dana Point Harbor

LOE ID:	73492
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	184
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Dana Point Harbor to determine beneficial use support and results are as follows: 7 of 184 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dana Point Harbor was collected at 1 monitoring site [FUEL DOCK]
Temporal Representation:	Data was collected over the time period 4/21/2005-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34003, Indicator Bacteria

Region 9

Dana Point Harbor

LOE ID:	73491
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	192
Number of Exceedances:	41
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Dana Point Harbor to determine beneficial use support and results are as follows: 41 of 192 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dana Point Harbor was collected at 2 monitoring sites [PILGRIM, PIER] The results from these two sites were averaged if sampled on the same day because they are within 200 meters of each other.
Temporal Representation:	Data was collected over the time period 4/21/2005-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID	48410	Region 9
Dana Point Harbor		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of the forty samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of forty samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in
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Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48410, Oxygen, Dissolved
Dana Point Harbor**

Region 9

LOE ID:	73487
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Seven of 40 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/L more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the DAPTDC, DAPTEB, DAPTLB, and DAPTLR stations.
Temporal Representation:	Samples were collected approximately twice semi-annually from September 2006 to June 2008.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Oceanside Harbor](#)
Water Body ID: CAB9021100019991117130531
Water Body Type: Bay & Harbor

DECISION ID	42666	Region 9
Oceanside Harbor		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity, and waters may be placed on the CWA section 303(d) List for toxicity alone.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of three sediment samples exceed the evaluation guideline for toxicity. Zero of two water samples exceed the evaluation guideline for toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of three sediment samples exceed the evaluation guideline for toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42666, Toxicity	Region 9
Oceanside Harbor	

LOE ID: 26501

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Toxicity tests were conducted using the upper water column sample on the mussel <i>Mytilus galloprovincialis</i> . Toxicity was not observed at either location.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.</p> <p>From the Basin Plan on pesticides, no individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The threshold for toxicity was less than 80% development relative to the control test species (Schiff et al, 2006)
Guideline Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
Spatial Representation:	Two stations were sampled in Oceanside Harbor. One station was located in the North Harbor, and the other in the South Harbor. Each station was sampled at upper, middle and lower levels within the water column to total three samples. Only the upper sample was used for toxicity testing.
Temporal Representation:	All samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Quality control conducted according to SCCWRP's Quality Assurance Project Plan for the Marina Copper Monitoring Study.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

Line of Evidence (LOE) for Decision ID 42666, Toxicity
Oceanside Harbor

Region 9

LOE ID:	74458
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Three of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 903OH_2003, 903OH_2004, and 903OH_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in July 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	44036	Region 9
Oceanside Harbor		

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown Unknown Nonpoint Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the five samples exceed the Basin Plan water quality objective for copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the five samples exceed the Basin Plan water quality objective for copper and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44036, Copper
Oceanside Harbor

Region 9

LOE ID:	26500
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Water samples were collected from two stations in the Oceanside Harbor at upper, middle, and lower levels. The means of 3 water samples from the two stations did not exceed the acute or chronic water quality objective.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Two stations were sampled in Oceanside Harbor. One station was located in the North Harbor, and the other in the South Harbor. Each station was sampled at upper, middle, and lower levels within the water column to total three samples.
Temporal Representation:	All samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted under SCCWRP's Quality Assurance Project Plan for the Marina Copper Monitoring Study.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

Line of Evidence (LOE) for Decision ID 44036, Copper
Oceanside Harbor

Region 9

LOE ID:	26502
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	2

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected from three stations in the Oceanside Harbor, two exceeded the acute and chronic water quality criteria.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06 Regional Harbor Monitoring Program Pilot Project 2006-07
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb (U.S. EPA, 2000)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	One station (O1M) was sampled in 2005 and two stations (O406M and O506M) in 2006 in Oceanside Harbor.
Temporal Representation:	Samples were collected on August 15, 2005 and August 21, 2006.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to Weston Solution's Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project.
QAPP Information Reference(s):	Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay \(area at mouth of Rose Creek only\)](#)
Water Body ID: CAB9064000020050104185659
Water Body Type: Bay & Harbor

DECISION ID	33706	Region 9
Mission Bay (area at mouth of Rose Creek only)		

Pollutant: Eutrophic
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33706, Eutrophic	Region 9
Mission Bay (area at mouth of Rose Creek only)	

LOE ID: 4676
Pollutant: Eutrophic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	41989	Region 9
Mission Bay (area at mouth of Rose Creek only)		

Pollutant:	Lead
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.</p>

Line of Evidence (LOE) for Decision ID 41989, Lead	Region 9
Mission Bay (area at mouth of Rose Creek only)	

LOE ID:	4677
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay \(area at mouth of Tecolote Creek only\)](#)
Water Body ID: CAB9065000020050104190651
Water Body Type: Bay & Harbor

DECISION ID	33089	Region 9
Mission Bay (area at mouth of Tecolote Creek only)		

Pollutant: Eutrophic
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record. Based on the information presented, the water body-pollutant should not be removed from the section 303(d) list because of a lack of available data that demonstrates that standards are being met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33089, Eutrophic	Region 9
Mission Bay (area at mouth of Tecolote Creek only)	

LOE ID: 320
Pollutant: Eutrophic
LOE Subgroup: Testimonial Evidence
Matrix: Not Specified
Fraction: None
Beneficial Use: Estuarine Habitat
Number of Samples: 0
Number of Exceedances: 0
Data and Information Type: Not Specified
Data Used to Assess Water Quality: From the letter written by the San Diego Baykeeper on 06/14/2004: We recommend continued listing of Mission Bay for eutrophication, lead, and bacterial indicators.
Data Reference: No raw data or other specifics were given.
[Placeholder reference 2006 303\(d\)](#)
SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, the WQO for Biostimulatory substances states that inland surface waters, bays and estuaries, and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The area is described as Mission Bay. Exact location was not given.

Temporal Representation: The letter regarding possible impairment was written on 06/14/2004. Dates of studies or sampling events were not given.

Environmental Conditions:
QAPP Information: QA Info Missing

QAPP Information Reference(s):

DECISION ID	32712	Region 9
Mission Bay (area at mouth of Tecolote Creek only)		

Pollutant: Lead

Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)

Revision Status: Original

Sources: Source Unknown

Expected TMDL Completion Date: 2019

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record. Information is not backed with numerical data. Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute to or cause a toxicological effect (section 2 of the Listing Policy).

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.

Line of Evidence (LOE) for Decision ID 32712, Lead	Region 9
Mission Bay (area at mouth of Tecolote Creek only)	

LOE ID: 321

Pollutant: Lead

LOE Subgroup: Testimonial Evidence

Matrix: Not Specified

Fraction: None

Beneficial Use: Industrial Service Supply

Number of Samples: 0

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	From the letter written by the San Diego Baykeeper on 06/14/2004: We recommend continued listing of Mission Bay for eutrophication, lead, and bacterial indicators (San Diego Baykeeper, 2004) .
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CTR, saltwater acute standard is 210 ppb and the saltwater chronic standard is 8.1 ppb. The probable effects level for marine and estuary sediment is 112.18 ppm. The Ocean Plan objective for the protection of marine aquatic life 6-month median is 2ppb, the daily maximum is 8 ppb and the instantaneous maximum is 20 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The area is described as Mission Bay. Exact location was not given.
Temporal Representation:	The letter regarding possible impairment was written on 06/14/2004. Exact dates of studies or sampling events were not given.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, near sub base](#)
Water Body ID: CAB9081000019990210085507
Water Body Type: Bay & Harbor

DECISION ID	43380	Region 9
San Diego Bay Shoreline, near sub base		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for removal from the section 303(d) list under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of samples exceeded the water quality criteria for benthic invertebrates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the nineteen samples exceeded the water quality criteria for benthic invertebrates and this does not satisfy the minimum sample requirements to de-list according to Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

The data for this site will be reassessed in future listing cycles in accordance with the California Sediment Quality Objectives.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43380, Benthic Community Effects	Region 9
San Diego Bay Shoreline, near sub base	

LOE ID:	30045
Pollutant:	Benthic Community Effects
LOE Subgroup:	Pollution
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twelve of the 14 sediment samples had BRI scores less than 31. The remaining two stations had BRI scores of 31.3 and 34.4 which place them in the lower end of Response Level 1.
Data Reference:	Sample collection was conducted by Space and Naval Warfare Systems Center San Diego in April 2004 at Submarine Base San Diego. Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The magnitude of disturbance shown by the benthic assemblage at each station was described by the embayment Benthic Response Index (BRI). BRI values in Response Level 2 or greater were consider degraded.
Guideline Reference:	Benthic Response Index (BRI) Categories: Reference: < 31 Response Level 1: 31 to 42 Response Level 2: 42 to 53 Response Level 3: 53 to 73 Response Level 4: > 73 Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.
Spatial Representation:	Fourteen sampling stations were layed out in a grid pattern covering approximately 60 acres in around Piers November, Mike, and Sierra. Three of the stations are in the area originally listed as impaired on the current 303d list.
Temporal Representation:	Samples were collected in April 2004.
Environmental Conditions:	
QAPP Information:	Sampling and analysis and quality assurance plans followed the general guidelines from previous San Diego Bay TMDL studies conducted by the Southern California Coastal Water Research Project, U.S. Navy, and the Regional Water Quality Control Board.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43380, Benthic Community Effects
San Diego Bay Shoreline, near sub base

Region 9

LOE ID:	4707
Pollutant:	Benthic Community Effects

LOE Subgroup:	Population/Community Degradation
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	43491	Region 9
San Diego Bay Shoreline, near sub base		

Pollutant:	Arsenic Cadmium Chlordane Chromium (total) Copper Lead Mercury Nickel PAHs (Polycyclic Aromatic Hydrocarbons) PCBs (Polychlorinated biphenyls) Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>These pollutants are being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 sediment samples exceeded the ERM or consensus base guidelines for marine sediment.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 14 sediment samples exceeded the ERM or consensus base guidelines for marine sediment and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43491, Multiple Pollutants

Region 9

San Diego Bay Shoreline, near sub base

LOE ID:	30036
Pollutant:	Arsenic Cadmium Chlordane Chromium (total) Copper Lead Mercury Nickel PAHs (Polycyclic Aromatic Hydrocarbons) PCBs (Polychlorinated biphenyls) Silver
LOE Subgroup:	Pollution
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the 14 sediment samples exceeded the ERM or consensus base guidelines for marine sediment. Sample collection was conducted by Space and Naval Warfare Systems Center San Diego on April 2004 at Submarine Base San Diego.
Data Reference:	Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Effects Range Median (ERM) for metals. Consensus base guidelines for polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), Chlordane, and DDT.
Guideline Reference:	Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report. Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments Development and Evaluation of Consensus-based Sediment Effect Concentrations for Polychlorinated Biphenyls Development and Evaluation of Sediment Quality Guidelines for Florida Coastal Waters Consensus Sediment Quality Guidelines for Polycyclic Aromatic Hydrocarbon Mixtures. Environmental Toxicology and Chemistry Sediment Toxicity, Contamination and Amphipod Abundance at a DDT-Dieldrin-Contaminated Site in San Francisco Bay. Environmental Toxicology and Chemistry 13:6 pp. 949-962. 1994
Spatial Representation:	Fourteen sampling stations were layed out in a grid pattern covering approximately 60 acres in around Piers November, Mike, and Sierra. Three of the stations are in the area originally listed as impaired on the current 303d list.
Temporal Representation:	Samples were collected in April 2004.
Environmental Conditions:	
QAPP Information:	Sampling and analysis and quality assurance plans followed the general guidelines from previous San Diego Bay TMDL studies conducted by the Southern California Coastal Water Research Project, U.S. Navy, and the Regional Water Quality Control Board.
QAPP Information Reference(s):	

DECISION ID 43801
San Diego Bay Shoreline, near sub base

Region 9

Pollutant: **Toxicity**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. [In 2006, water toxicity had been included in the Sediment Toxicity listing]

Two lines of evidence are available in the administrative record to assess pollutant. Three of 14 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 14 samples exceeded the toxicity water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43801, Toxicity
San Diego Bay Shoreline, near sub base

Region 9

LOE ID: 4708

Pollutant: Sediment Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43801, Toxicity
San Diego Bay Shoreline, near sub base

Region 9

LOE ID: 29978

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Marine Habitat
Aquatic Life Use: Marine Habitat

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: Toxicity testing of sediments
Data Used to Assess Water Quality: None of the 14 sediment samples were statistically significantly different from the control and below the minimum significant difference threshold for marine amphipods. Sample collection was conducted by Space and Naval Warfare Systems Center San Diego in April 2004 at Submarine Base San Diego.

Data Reference: [Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The sample is consider toxic if there is statistically significant difference from the control and the minimum significant difference threshold is exceeded for the test species Eohaustorius estuarius.

Guideline Reference: [Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.](#)

Spatial Representation: Fourteen sampling stations were layed out in a grid pattern covering approximately 60 acres in around Piers November, Mike, and Sierra. Three of the stations are in the area originally listed as impaired on the current 303d list.

Temporal Representation: Samples were collected in April 2004.

Environmental Conditions:
QAPP Information: Sampling and analysis and quality assurance plans followed the general guidelines from previous San Diego Bay TMDL studies conducted by the Southern California Coastal Water Research Project, U.S. Navy, and the Regional Water Quality Control Board.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43801, Toxicity
San Diego Bay Shoreline, near sub base

Region 9

LOE ID:	30035
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	<p>One of the 14 sediment samples were statistically significantly different from the control and below the minimum significant difference threshold for mussel larvae <i>Mytilus galloprovincialis</i>.</p> <p>Three of the 14 sediment samples were statistically significantly different from the control and below the minimum significant difference threshold for purple sea urchin <i>Strongylocentrotus purpuratus</i>.</p> <p>Sample collection was conducted by Space and Naval Warfare Systems Center San Diego in April 2004 at Submarine Base San Diego.</p>
Data Reference:	Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The sample is consider toxic if there is statistically significant difference from the control and the minimum significant difference threshold is exceeded for the test species.
Guideline Reference:	Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.
Spatial Representation:	Fourteen sampling stations were layed out in a grid pattern covering approximately 60 acres in around Piers November, Mike, and Sierra. Three of the stations are in the area originally listed as impaired on the current 303d list.
Temporal Representation:	Samples were collected in April 2004.
Environmental Conditions:	
QAPP Information:	Sampling and analysis and quality assurance plans followed the general guidelines from previous San Diego Bay TMDL studies conducted by the Southern California Coastal Water Research Project, U.S. Navy, and the Regional Water Quality Control Board.
QAPP Information Reference(s):	

DECISION ID	44025	Region 9
San Diego Bay Shoreline, near sub base		

Pollutant:	Cadmium Chlordane DDT (Dichlorodiphenyltrichloroethane) Mercury PAHs (Polycyclic Aromatic Hydrocarbons) Tributyltin TBT (Tributylstanne)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the seven samples exceed the OEHHHA or USEPA screening value.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the seven samples exceed the OEHHHA or USEPA screening value and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 44025, Multiple Pollutants
San Diego Bay Shoreline, near sub base**

Region 9

LOE ID:	30072
Pollutant:	Cadmium Chlordane DDT (Dichlorodiphenyltrichloroethane) Mercury PAHs (Polycyclic Aromatic Hydrocarbons) Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollution
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	None of the bioaccumulation composite tissue samples (n = 7) exceeded the tissue screening values for cadmium, mercury, total DDT, total PAHs, tributyltin or total chlordane.
Data Reference:	Sample collection was conducted by Space and Naval Warfare Systems Center San Diego in April 2004 at Submarine Base San Diego. Sediment Site Assessment Study, Submarine Base, San Diego, Draft Final Report.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	OEHHHA screening value for cadmium, mercury and total DDT for protection of human health from consumption of fish and shellfish. USEPA screening value for total PAHs, tributyltin and total chlordane for protection of

human health from consumption of fish and shellfish.

Guideline Reference:

[Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA](#)
[Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)

Spatial Representation:

Fourteen sampling stations were layed out in a grid pattern covering approximately 60 acres in around Piers November, Mike, and Sierra. Of those stations, seven were selected for bioaccumulation studies. Three of the seven stations were in the area originally listed as impaired on the current 303d list.

Temporal Representation:

Samples were collected in April 2004.

Environmental Conditions:

QAPP Information:

Sampling and analysis and quality assurance plans followed the general guidelines from previous San Diego Bay TMDL studies conducted by the Southern California Coastal Water Research Project, U.S. Navy, and the Regional Water Quality Control Board.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay, Shelter Island Yacht Basin](#)
Water Body ID: CAB9081000019990210091034
Water Body Type: Bay & Harbor

DECISION ID	35184	Region 9
San Diego Bay, Shelter Island Yacht Basin		

Pollutant: Copper, Dissolved
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status Original
Sources: Nonpoint Source | Point Source
TMDL Name: Shelter Island Yacht Basin Dissolved Copper
TMDL Project Code: 167
Date TMDL Approved by USEPA: 01/01/2003
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list and placing it in the Being Addressed category because a TMDL was approved by RWQCB and USEPA and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the 3.1 ppb CTR chronic saltwater criteria, but the number of samples is insufficient to determine with the confidence and power of the Listing Policy if standards are met or exceeded.
4. The San Diego Yacht Basin Dissolved Copper TMDL was approved by RWQCB in 2003 and subsequently approved by USEPA in 2003
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 35184, Copper, Dissolved	Region 9
San Diego Bay, Shelter Island Yacht Basin	

LOE ID:	323
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected in 03/2004 by the RWQCB. One sample was collected and was not in exceedance of the acute or the chronic standards.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR: The dissolved copper acute saltwater criterion is 4.8 ppb. The dissolved copper chronic criterion is 3.1 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Diego Bay, Shelter Island Yacht Basin, mid-channel off the entrance to the yacht basin (SDRWQCB, 2004c).
Temporal Representation:	Samples were collected on 03/20/2004 at 9:49am.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Harbor Island \(West Basin\)](#)
Water Body ID: CAB9081000020020306104110
Water Body Type: Bay & Harbor

DECISION ID	44898	Region 9
San Diego Bay Shoreline, at Harbor Island (West Basin)		

Pollutant: Copper
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Eight out of Ten samples exceeded the California Toxics Rule Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 10 samples exceeded the 3.1 ppb CTR chronic saltwater criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 44898, Copper	Region 9
San Diego Bay Shoreline, at Harbor Island (West Basin)	

LOE ID: 324
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Estuarine Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 03/2004. Eight of 10 samples were in exceedance of the chronic standards. The samples collected between piers 24 and 25 were in exceedance of chronic criteria and samples collected in the main channel were not in exceedance. The sample collected at mid-channel, south of Tom Ham's was not in exceedance of the chronic standard (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR: The dissolved copper chronic criterion is 3.1 ppb, and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Diego Bay at Harbor Island in the West Basin at the innermost location near the fence between the park and hotel, between piers 6 and 7, between piers 12 and 13, between piers 18 and 19, between piers 24 and 25, and in the main channel outside of Harbor Island West.
Temporal Representation:	On 03/20/2004 a sample was collected at Harbor Island West mid-channel, south of Tom Ham's. Samples were collected on 03/15/2004. One sample was also collected on 03/20/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Americas Cup Harbor](#)
Water Body ID: CAB9081000020020307124500
Water Body Type: Bay & Harbor

DECISION ID	37281	Region 9
San Diego Bay Shoreline, at Americas Cup Harbor		

Pollutant: Copper
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 5 samples exceeded the 3.1 ppb CTR chronic saltwater criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Based on comments received on the April 19, 2010 State Water Board staff report for the 2010 Integrated Report, State Water Board staff recommended to change the first year listed from 1996 to 1992.

August 4, 2010 the State Water Board approved the State Water Board staff recommendation.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 37281, Copper	Region 9
San Diego Bay Shoreline, at Americas Cup Harbor	

LOE ID: 325

Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 5 samples were in exceedance of the dissolved chronic criteria. Samples collected near the entrance, between piers 3 and 4, and at the west corner of the marina near piling 2 and the Shelter Island boatyard were in exceedance of the dissolved chronic criteria (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR: the dissolved copper chronic criterion is 3.1 ppb, and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Diego Bay, Americas Cup Harbor, near the entrance, between piers 3 and 4, by the bridge and the pier, near piling number 6 and Kettenberg marina, and at the west corner of the marina near piling 2 and the Shelter Island boatyard.
Temporal Representation:	Samples were collected on 03/15/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Bessemer Street](#)
Water Body ID: CAB9081000020041209184541
Water Body Type: Bay & Harbor

DECISION ID 48316

Region 9

San Diego Bay Shoreline, at Bessemer Street

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the Contact Recreation Geomean Objective for Enterococcus, Zero of the one sample exceeded the Contact Recreation Geomean Objective for Fecal Coliform, Three out of Seven samples exceeded the Shellfish Harvesting Single Sample Maximum Objective for Total Coliform, One of the One sample exceeded the Shellfish Harvesting Geomean Objective for Total Coliform, and Zero of the One sample exceeded the Contact Recreation Objective for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the Contact Recreation Geomean Objective for Enterococcus, Zero of the one sample exceeded the Contact Recreation Geomean Objective for Fecal Coliform, Three out of Seven samples exceeded the Shellfish Harvesting Single Sample Maximum Objective for Total Coliform, One of the One sample exceeded the Shellfish Harvesting Geomean Objective for Total Coliform, and Zero of the One sample exceeded the Contact Recreation Objective for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48316, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bessemer Street

LOE ID: 77695

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One of the one samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline, at Bessemer Street.
Temporal Representation:	The samples were collected from July 2008 to July 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48316, Indicator Bacteria
San Diego Bay Shoreline, at Bessemer Street

Region 9

LOE ID:	75631
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 1 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Samples were collected at the Bessemer Street site.
Temporal Representation: Samples were collected from July 2008 to July 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48316, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bessemer Street

LOE ID: 75630

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 1 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Bessemer Street site.
Temporal Representation: Samples were collected from July 2008 to July 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48316, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bessemer Street

LOE ID: 75632

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 7
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BeachWatch data for San Diego Bay Shoreline, at Bessemer Street to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Coliform, Total.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego Bay Shoreline, at Bessemer Street was collected at 1 monitoring site [Bessemer St]
Temporal Representation:	Data was collected over the time period 7/3/2008-7/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48316, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bessemer Street

LOE ID:	75633
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 1 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bessemer Street site.
Temporal Representation:	Samples were collected from July 2008 to July 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, Downtown Anchorage](#)
Water Body ID: CAB9082100019990210091816
Water Body Type: Bay & Harbor

DECISION ID	35140	Region 9
San Diego Bay Shoreline, Downtown Anchorage		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. This waterbody will be reassessed in next listing cycle in accordance with Sediment Quality Objectives.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 35140, Benthic Community Effects	Region 9
San Diego Bay Shoreline, Downtown Anchorage	

LOE ID: 4700

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID	35141	Region 9
San Diego Bay Shoreline, Downtown Anchorage		

Pollutant:	Sediment Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 35141, Sediment Toxicity	Region 9
San Diego Bay Shoreline, Downtown Anchorage	

LOE ID:	4701
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35141, Sediment Toxicity
San Diego Bay Shoreline, Downtown Anchorage

Region 9

LOE ID:	4700
Pollutant:	Benthic Community Effects
LOE Subgroup:	Population/Community Degradation
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, Vicinity of B St and Broadway Piers](#)
Water Body ID: CAB9082100019990210092640
Water Body Type: Bay & Harbor

DECISION ID	44435	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Data collected from 1999 to 2007 shows that 7 of 40 single samples exceed the water quality objective for total coliform for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data collected from 1999 to 2007 shows that 7 of 40 single samples exceed the water quality objective for total coliform for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	

LOE ID: 30933
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected by from April 2006 through January 2007. None of the 10 geomeans exceeded the geomean water quality objective.
Data Reference:	Submittal of Data for B St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Forty samples taken at four different stations along the B St. Pier in San Diego Bay.
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Vicinity of B St and Broadway Piers

LOE ID:	30919
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected by from April 2006 through January 2007. Seven of 40 samples exceeded the single sample water quality objective.
Data Reference:	Submittal of Data for B St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Forty samples taken at four different stations along the B St. Pier in San Diego Bay.
Temporal Representation:	Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Vicinity of B St and Broadway Piers

LOE ID: 30927

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 40

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline monitoring data was collected from April 2006 through January 2007. None of the 40 single samples exceeded the single sample water quality objective.

Data Reference: [Submittal of Data for B St. Shorelines, Lindbergh Hydrologic Area \(908.21\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Forty samples taken at four different stations along the B St. Pier in San Diego Bay
Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance Port of San Diego's Quality Assurance Manual.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Vicinity of B St and Broadway Piers

LOE ID: 30923

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 40

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Monitoring data was collected from April 2006 through January 2007. One of 40 samples exceeded the single sample water quality objective.

Data Reference:	Submittal of Data for B St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Forty samples taken at four different stations along the B St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	

LOE ID:	4717
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	

LOE ID:	30929
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected by from April 2006 through January 2007. None of the 10 geomeans exceeded the geomean water quality objective.
Data Reference:	Submittal of Data for B St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Forty samples taken at four different stations along the B St. Pier in San Diego Bay.
Temporal Representation:	Samples were collected from April 2006 through January 2007
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers

Region 9

LOE ID:	30925
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the April 2006 through January 2007. None of the 10 geomeans exceeded the geomean water quality objective.
Data Reference:	Submittal of Data for B St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Forty samples taken at four different stations along the B St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44435, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	

LOE ID:	30931
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. One of 40 samples exceeded the single sample water quality objective.
Data Reference:	Submittal of Data for B St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Forty samples taken at four different stations along the B St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

DECISION ID	33416	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.

One line of evidence is available in the administrative record to assess this pollutant. One of sample exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample exceeded the 3.1 ppb CTR chronic saltwater criterion, but the number of samples is insufficient to determine with the confidence of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33416, Copper
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers**

Region 9

LOE ID:	326
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 03/2004. One sample was collected and was not in exceedance of the acute or chronic standard. (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR: The dissolved copper acute saltwater criterion is 4.8 ppb. The dissolved copper chronic criterion is 3.1 ppb. This criteria is more stringent or as stringent as the other criteria found.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at the San Diego Bay mid-channel between the Broadway pier and Coronado.
Temporal Representation:	Sample was collected on 03/20/2004 at 1:36pm.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	34654	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 34654, Benthic Community Effects	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	

LOE ID:	4716
Pollutant:	Benthic Community Effects
LOE Subgroup:	Population/Community Degradation
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	34709	Region 9
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers		

Pollutant:	Sediment Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 34709, Sediment Toxicity San Diego Bay Shoreline, Vicinity of B St and Broadway Piers

Region 9

LOE ID: 4718

Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Not Recorded

Beneficial Use: Marine Habitat

Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, near Switzer Creek](#)
Water Body ID: CAB9082100019990210093822
Water Body Type: Bay & Harbor

DECISION ID 43693

Region 9

San Diego Bay Shoreline, near Switzer Creek

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Original
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4.11 of the Listing Policy.

Three lines of evidence are available in the administrative record to assess this pollutant. One of samples exceeded the water quality objective for lindane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 18 samples exceeded the lindane water quality objective.

The one sample that exceeded the Lindane objective was recorded at 8.2 ug/kg. This value should be treated as an outlier since all other Lindane samples collected in San Diego Bay for the same program had values less than 1.0 ug/kg or were recorded as non-detects. Subsequent sediment sampling that occurred in 2003 and 2004 at the mouth of Switzer Creek all had lindane sediment chemistry values recorded as non-detects.

Toxicity identification evaluations conducted in 2004 at the mouth of Switzer Creek indicate that Chlordane is the most likely pesticide that contributes to the sediment toxicity in that area. Chlordane values exceeded the sediment quality guidelines and 95% upper prediction limits seven out of the eight samples collected in 2004.

All other pesticides, including lindane, were recorded as non detects in all samples collected in July 2003, March 2004, August 2004 and October 2004.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43693, Lindane/gamma Hexachlorocyclohexane (gamma-

San Diego Bay Shoreline, near Switzer Creek

LOE ID:	29916
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Estuarine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Nine sediment samples were analyzed and all were recorded as non-detects at a detection limit of 1.0 ng/g dry weight. The three samples were collected in February, August and October 2004 as part of a San Diego Bay study on three TMDL locations.
Data Reference:	TMDL Sediment Quality Assessment Study at the B Street/Broadway Piers, Downtown Anchorage, and Switzer Creek, San Diego PHASE II
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	For lindane the sediment objective is 0.37 ug/g.
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Nine sediment samples were collected near the mouth of Switzer Creek in San Diego Bay.
Temporal Representation:	Samples were collected in February, August and October 2004.
Environmental Conditions:	Samples were collected from the top 5 centimeters of sediment surface layer.
QAPP Information:	Samples were collected in following the guidelines used for Bight 1998 Regional Monitoring surveys.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43693, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

San Diego Bay Shoreline, near Switzer Creek

LOE ID:	29816
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Estuarine Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Two sediment samples were analyzed and both were recorded as non-detects at a detection limit of 0.2 ng/g dry weight. The samples were collected in 1992 and 1993 for the Bay Protection and Toxic Cleanup Program.
Data Reference:	Status of The Bay Protection and Toxic Cleanup Program Appendices
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	For lindane the sediment objective is 0.37 ug/g.
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Two sediment samples were collected near the mouth of Switzer Creek in San Diego Bay.
Temporal Representation:	Samples were collected in 1992 and 1993
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with State Water Board requirements.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43693, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Diego Bay Shoreline, near Switzer Creek

LOE ID:	29909
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Estuarine Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Six sediment samples were analyzed and all were recorded as non-detects at a detection limit of 1.0 ng/g dry weight. The samples were collected in February and July 2003 as part of a San Diego Bay study on three TMDL locations.
Data Reference:	Sediment Quality Assessment Study at the B Street/Broadway Piers, Downtown Anchorage, and Switzer Creek, San Diego Bay
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	For lindane the sediment objective is 0.37 ug/g.
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures.

Spatial Representation: Six sediment samples were collected near the mouth of Switzer Creek in San Diego Bay.
 Temporal Representation: Samples were collected in February and July 2003.
 Environmental Conditions: Samples were collected from the top 5 centimeters of sediment surface layer.
 QAPP Information: Samples were collected in following the guidelines used for Bight 1998 Regional Monitoring surveys.
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43693, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Diego Bay Shoreline, near Switzer Creek

LOE ID: 4710

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Not Recorded

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
 Number of Exceedances: 0

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
 Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
 Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
 Temporal Representation: Unspecified
 Environmental Conditions: Unspecified
 QAPP Information: Unspecified
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43693, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Diego Bay Shoreline, near Switzer Creek

LOE ID: 30105

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
 LOE Subgroup: Pollutant-Sediment
 Matrix: Sediment
 Fraction: None

Beneficial Use: Marine Habitat
 Aquatic Life Use: Estuarine Habitat

Number of Samples: 2
 Number of Exceedances: 0

Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Two sediment samples were analyzed and both were recorded as non-detects at a detection limit of 0.2 ng/g dry weight. The samples were collected in 1992 and 1994 for the Bay Protection and Toxic Cleanup Program.
Data Reference:	Chemistry Toxicity and Benthic Community Conditions In Sediments of The San Diego Bay Region Final Addendum Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	For lindane the sediment objective is 0.37 ug/g.
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Two sediment samples were collected near the mouth of Switzer Creek in San Diego Bay.
Temporal Representation:	Samples were collected in 1992 and 1994
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with State Water Board requirements.
QAPP Information Reference(s):	

DECISION ID	44920	Region 9
San Diego Bay Shoreline, near Switzer Creek		

Pollutant:	Chlordane
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44920, Chlordane	Region 9
San Diego Bay Shoreline, near Switzer Creek	

LOE ID:	4709
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	44697	Region 9
San Diego Bay Shoreline, near Switzer Creek		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44697, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
San Diego Bay Shoreline, near Switzer Creek	

LOE ID:	4711
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Not Recorded

Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Marriott Marina](#)
Water Body ID: CAB9082100020020307102410
Water Body Type: Bay & Harbor

DECISION ID	33165	Region 9
San Diego Bay Shoreline, at Marriott Marina		

Pollutant: Copper
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three out of Four samples exceeded the California Toxics Rule Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 4 samples exceeded the 3.1 ppb dissolved CTR chronic criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33165, Copper	Region 9
San Diego Bay Shoreline, at Marriott Marina	

LOE ID: 327
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 03/2004. Three of 4 samples were in exceedance of the chronic criteria. All samples in exceedance were collected in the Marina. The samples collected in the main channel were not in exceedance of the chronic criteria (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR: the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the San Diego Bay at the Marriott Marina and in the Marriott Marina Main Channel. Samples collected at the marina were collected on the west and east sides of the marina and in the middle.
Temporal Representation:	Samples were collected on 03/115/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Harbor Island \(East Basin\)](#)
Water Body ID: CAB9082100020021230112926
Water Body Type: Bay & Harbor

DECISION ID	33164	Region 9
San Diego Bay Shoreline, at Harbor Island (East Basin)		

Pollutant: Copper
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three out of Three samples exceeded the California Toxics Rule Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 3 samples exceeded the 3.1 ppb dissolved CTR chronic saltwater criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33164, Copper	Region 9
San Diego Bay Shoreline, at Harbor Island (East Basin)	

LOE ID: 328
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 03/2004. Three of 3 samples (1 sample collected at each location) were in exceedance of the chronic standards (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR: The dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Diego Bay, Harbor Island East Basin, off of last pier in innermost marina, off pier no. 6 from entrance, and off pier no. 2 from entrance.
Temporal Representation:	Samples were collected on 03/15/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Spanish Landing](#)
Water Body ID: CAB9082100020041209181254
Water Body Type: Bay & Harbor

DECISION ID	41588	Region 9
San Diego Bay Shoreline, at Spanish Landing		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 3 of 96 geomean samples collected during AB411 period exceed the water quality objective (WQO) for enterococcus for REC-1, and 40 of 301 samples exceed the WQO for total coliform of a SSM of 230/100 ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 3 of 96 geomean samples collected during AB411 period exceed the water quality objective (WQO) for enterococcus for REC-1, and 40 of 301 samples exceed the WQO for total coliform of a SSM of 230/100 ml and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Spanish Landing	

LOE ID:	30777
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	182
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 188 single samples were collected of which 182 are dry weather (AB411) samples with 10 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID:	27276
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected with 54 monthly geomeans calculated. None of the 55 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml

Objective/Criterion Reference: (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID: 31316

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 37

Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 161 dry month (April through October) single samples were collected with 37 dry month geomeans calculated. Three of the 37 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria**Region 9****San Diego Bay Shoreline, at Spanish Landing**

LOE ID:	30883
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	223
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected of which 223 are dry weather (AB411) samples with one of those samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria**Region 9****San Diego Bay Shoreline, at Spanish Landing**

LOE ID:	30676
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	224
Number of Exceedances:	18

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected of which 224 are dry weather (AB411) samples with 18 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID:	31318
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 161 dry month (April through October) single samples were collected with 37 dry month geomeans calculated. None of the 37 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation:

Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Spanish Landing

LOE ID: 29811

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 91

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 91 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Beach advisories were from Spanish Landing located in San Diego Bay.

Temporal Representation:	The beach advisories covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Spanish Landing	

LOE ID:	27278
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected with 54 monthly geomeans calculated. Three of the 54 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Spanish Landing	

LOE ID:	27274
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	231
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected with 19 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID:	75646
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 59 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Spanish Landing site.
Temporal Representation: Samples were collected from April 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID: 75645

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 70
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed bw data for San Diego Bay Shoreline, at Spanish Landing to determine beneficial use support and results are as follows: 1 of 70 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego Bay Shoreline, at Spanish Landing was collected at 1 monitoring site [EH-160]
Temporal Representation: Data was collected over the time period 4/2/2008-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID: 75644

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 59
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 59 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Spanish Landing site.
Temporal Representation:	Samples were collected from January 2008 to August 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Spanish Landing

LOE ID:	75642
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 59 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Spanish Landing site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Spanish Landing

LOE ID:	27277
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	46
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 188 single samples were collected and 46 geomeans calculated. One of the 47 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID:	27268
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	231
Number of Exceedances:	39
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 231 single samples were collected with 39 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Spanish Landing	

LOE ID:	27275
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected with 7 samples correlated with a storm event. One of the 7 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID: 31317

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 37

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 161 dry month (April through October) single samples were collected with 37 dry month geomeans calculated. None of the 37 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID: 77698

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	59
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One of the 59 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline, at Spanish Landing.
Temporal Representation:	The samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID:	27273
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 188 single samples were collected with 6 samples correlated with a storm event. One of the 6 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Spanish Landing

LOE ID: 27272

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 188
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 188 single samples were collected with 11 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID: 27271

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected with 8 samples correlated with a storm event. None of the 8 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID: 27270

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	231
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41588, Indicator Bacteria
San Diego Bay Shoreline, at Spanish Landing

Region 9

LOE ID:	27269
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 231 single samples were collected with 8 samples correlated with a storm event. Three of the 8 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Spanish Landing, San Diego, California. Station identification number is EH-160.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, near Chollas Creek](#)
Water Body ID: CAB9082200019990210102831
Water Body Type: Bay & Harbor

DECISION ID	35142	Region 9
San Diego Bay Shoreline, near Chollas Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown | Unknown Nonpoint Source | Unknown Point Source
Expected TMDL Completion Date: 2010
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. This waterbody will be reassessed in next listing cycle in accordance with Sediment Quality Objectives.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 35142, Benthic Community Effects	Region 9
San Diego Bay Shoreline, near Chollas Creek	

LOE ID: 4703

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID	33573	Region 9
San Diego Bay Shoreline, near Chollas Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available (one for enterococcus, one for fecal coliform and the other for total coliform) in the administrative record to assess this pollutant. Only one sample in each bacterial indicator exceeded water quality standards.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used may satisfy the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 21 samples taken in 1999 exceeded the AB 411 bacterial indicator standards and this does not exceed the allowable frequency listed in Table 3.3 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 33573, Indicator Bacteria	Region 9
San Diego Bay Shoreline, near Chollas Creek	

LOE ID:	329
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	<p>Data were collected by the City of San Diego in 1999. There was not enough data to calculate geomeans for any of the bacterial indicators.</p> <p>AB411 Standards: For enterococcus, 1 of 7 single sample concentrations was in exceedance. For fecal coliform, 1 of 8 single sample concentration was in exceedance. For total coliform, where the FC/TC ratio was below 0.1, there were no exceedances. Where the ratio was above 0.1, 1 of 6 samples was in exceedance.</p> <p>Basin Plan standards: For fecal coliform, there was not enough data to calculate geomeans and only single sample concentrations were looked at. Basin Plan stds. for REC2 for fecal coliform deal with 30-day averages, which could not be calculated from this dataset. However, in looking at the dataset, the assessor can comment that 7 of 8 single sample concentrations were below 400 colonies/100 mL, with one concentration being 3000 colonies/100 mL. (City of San Diego, 2004).</p>
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters with a REC2 beneficial use, the WQO for Fecal Coliform is and average of 2,000 colonies/100mL for any 30-day period. No more than 10% of total samples during any 30-day period should exceed 4,000 colonies per 100 mL.</p> <p>AB411 standards: for fecal coliform: 30-day avg is 200 colonies/100 mL, single sample standard is 400 colonies/100 mL. For total coliform: 30-day avg. is 1,000 colonies/100mL, single sample standard is 10,000 colonies/100 mL. If fecal/total ratio is greater than 0.1, the single sample maximum for total coliform is 1,000 colonies/100 mL.. The AB411 standard for enterococcus for the 30-day avg is 35 colonies/100mL, single sample maximum is 104 colonies/100 mL.</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Diego Bay, near Chollas Creek at a "middle" location.
Temporal Representation:	Samples were collected from 02/22/1999 to 08/17/1999.
Environmental Conditions:	Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

<div> <div>DECISION ID</div> <div>35199</div> <div>San Diego Bay Shoreline, near Chollas Creek</div> </div>		Region 9
<div> <div>Pollutant:</div> <div>Final Listing Decision:</div> <div>Last Listing Cycle's Final Listing Decision:</div> <div>Revision Status</div> <div>Sources:</div> <div>Expected TMDL Completion Date:</div> <div>Impairment from Pollutant or Pollution:</div> </div>	<div> <div>Sediment Toxicity</div> <div>List on 303(d) list (TMDL required list)</div> <div>List on 303(d) list (TMDL required list)(2012)</div> <div>Original</div> <div>Source Unknown Unknown Nonpoint Source Unknown Point Source</div> <div>2010</div> <div>Pollutant</div> </div>	
Regional Board Conclusion:	The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:	

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 35199, Sediment Toxicity
San Diego Bay Shoreline, near Chollas Creek**

Region 9

LOE ID: 4704

Pollutant: Sediment Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 35199, Sediment Toxicity
San Diego Bay Shoreline, near Chollas Creek**

Region 9

LOE ID: 4703

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, near Coronado Bridge](#)
Water Body ID: CAB9082200020021015082223
Water Body Type: Bay & Harbor

DECISION ID	35211	Region 9
San Diego Bay Shoreline, near Coronado Bridge		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. This waterbody will be reassessed in next listing cycle in accordance with Sediment Quality Objectives.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 35211, Benthic Community Effects	Region 9
San Diego Bay Shoreline, near Coronado Bridge	

LOE ID: 4705

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID	35212	Region 9
San Diego Bay Shoreline, near Coronado Bridge		

Pollutant:	Sediment Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 35212, Sediment Toxicity	Region 9
San Diego Bay Shoreline, near Coronado Bridge	

LOE ID:	4706
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35212, Sediment Toxicity
San Diego Bay Shoreline, near Coronado Bridge

Region 9

LOE ID:	4705
Pollutant:	Benthic Community Effects
LOE Subgroup:	Population/Community Degradation
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, between Sampson and 28th Streets](#)
Water Body ID: CAB9082200020021015082916
Water Body Type: Bay & Harbor

DECISION ID	34109	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets		

Pollutant: Copper
Final Listing Decision: List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by action other than TMDL)(2012)
Revision Status: Original
Sources: Nonpoint Source | Point Source
Expected Attainment Date: 2015
Implementation Action Other than TMDL: A draft cleanup and abatement order has been issued to two shipyards that occupy the shoreline between Sampson Street and 28th Street.
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34109, Copper	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets	

LOE ID: 4695

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	34200	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets		

Pollutant:	Mercury
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)(2012)
Revision Status	Original
Sources:	Major Industrial Point Source
Expected Attainment Date:	2013
Implementation Action Other than TMDL:	A draft cleanup and abatement order has been issued to two shipyards that occupy the shoreline between Sampson Street and 28th Street.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34200, Mercury	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets	

LOE ID:	4696
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	34260	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)(2012)
Revision Status	Original
Sources:	Nonpoint Source Point Source
Expected Attainment Date:	2013
Implementation Action Other than TMDL:	A draft cleanup and abatement order has been issued to two shipyards that occupy the shoreline between Sampson Street and 28th Street.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34260, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets	

LOE ID:	4697
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Unspecified

Temporal Representation: Unspecified

Environmental Conditions: Unspecified

QAPP Information: Unspecified

QAPP Information Reference(s):

DECISION ID	41722	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)(2012)
Revision Status	Original
Sources:	Major Industrial Point Source Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected Attainment Date:	2013
Implementation Action Other than TMDL:	A draft cleanup and abatement order has been issued to two shipyards that occupy the shoreline between Sampson Street and 28th Street.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41722, PCBs (Polychlorinated biphenyls)	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets	

LOE ID:	4698
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	35139	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets		

Pollutant:	Zinc
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)(2012)
Revision Status	Original
Sources:	Source Unknown Unknown Nonpoint Source Unknown Point Source
Expected Attainment Date:	2013
Implementation Action Other than TMDL:	A draft cleanup and abatement order has been issued to two shipyards that occupy the shoreline between Sampson Street and 28th Street.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 35139, Zinc	Region 9
San Diego Bay Shoreline, between Sampson and 28th Streets	

LOE ID:	4699
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, 32nd St San Diego Naval Station](#)
Water Body ID: CAB9083100019990210105121
Water Body Type: Bay & Harbor

DECISION ID	44918	Region 9
San Diego Bay Shoreline, 32nd St San Diego Naval Station		

Pollutant: Benthic Community Effects
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: No new data was assessed for this listing cycle. The decision has not changed and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

No new data were assessed for 2008. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44918, Benthic Community Effects	Region 9
San Diego Bay Shoreline, 32nd St San Diego Naval Station	

LOE ID: 4693

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID	34113	Region 9
San Diego Bay Shoreline, 32nd St San Diego Naval Station		

Pollutant:	Sediment Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: No new data was assessed for this listing cycle. The decision has not changed and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

No new data were assessed for 2008. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34113, Sediment Toxicity	Region 9
San Diego Bay Shoreline, 32nd St San Diego Naval Station	

LOE ID:	4694
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34113, Sediment Toxicity
San Diego Bay Shoreline, 32nd St San Diego Naval Station

Region 9

LOE ID: 4693

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, Seventh Street Channel](#)
Water Body ID: CAB9083200019990210105829
Water Body Type: Bay & Harbor

DECISION ID	34077	Region 9
San Diego Bay Shoreline, Seventh Street Channel		

Pollutant: Benthic Community Effects
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2008
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.
A TMDL is in progress for this location.

Line of Evidence (LOE) for Decision ID 34077, Benthic Community Effects	Region 9
San Diego Bay Shoreline, Seventh Street Channel	

LOE ID: 4714

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID	33850	Region 9
San Diego Bay Shoreline, Seventh Street Channel		

Pollutant:	Sediment Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2008
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

A TMDL is in progress for this location.

Line of Evidence (LOE) for Decision ID 33850, Sediment Toxicity	Region 9
San Diego Bay Shoreline, Seventh Street Channel	

LOE ID:	4715
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33850, Sediment Toxicity
San Diego Bay Shoreline, Seventh Street Channel

Region 9

LOE ID: 4714

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, North of 24th Street Marine Terminal](#)
Water Body ID: CAB9083200019990210110421
Water Body Type: Bay & Harbor

DECISION ID	34320	Region 9
San Diego Bay Shoreline, North of 24th Street Marine Terminal		

Pollutant: Benthic Community Effects
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 34320, Benthic Community Effects	Region 9
San Diego Bay Shoreline, North of 24th Street Marine Terminal	

LOE ID: 4712

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Unspecified

Temporal Representation: Unspecified

Environmental Conditions: Unspecified

QAPP Information: Unspecified

QAPP Information Reference(s):

DECISION ID

35121

Region 9

San Diego Bay Shoreline, North of 24th Street Marine Terminal

Pollutant: **Sediment Toxicity**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 35121, Sediment Toxicity

Region 9

San Diego Bay Shoreline, North of 24th Street Marine Terminal

LOE ID: 4712

Pollutant: Benthic Community Effects
LOE Subgroup: Population/Community Degradation
Matrix: Sediment
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35121, Sediment Toxicity
San Diego Bay Shoreline, North of 24th Street Marine Terminal

Region 9

LOE ID:	4713
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Bayside Park \(J Street\)](#)
Water Body ID: CAB9091100020041209205208
Water Body Type: Bay & Harbor

DECISION ID	43599	Region 9
San Diego Bay Shoreline, at Bayside Park (J Street)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Twelve of 55 samples exceed the Contact Recreation Beneficial use water quality objective enterococcus, Zero out of 57 geo-metric mean samples exceeded the Shellfish Harvesting Beneficial Use Objective for Total Coliform, and 94 out of 331 samples exceeded the Single Sample Maximum Shellfish Harvesting Beneficial Use Objective.

The water body segment is identified as an AB411 beach and data collected during the time frame of April 1st to October 31st (dry weather) is assessed using a four percent exceedance percentage (sections 3.3 and 4.3 of Listing Policy). There are two additional lines of evidence for dry weather single sample and geometric mean calculations. Thirty-nine of 256 dry weather single samples and 12 of 105 geo-metric mean calculations exceeded the recreational use single sample and geo-metric mean criteria for Enterococcus, respectively. This exceeds the allowable limit in Table 4.2 (at a four percent exceedance percentage A– AB411). Sixteen of 210 dry weather single samples and zero of 97 geometric mean calculations exceeded the Objective for Fecal Coliform for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 4.3 of the Listing Policy. Four of 256 single samples and 3 of 48 geometric mean calculations exceeded the criteria for recreational use for Total Coliform and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 55 samples exceed the Contact Recreation Beneficial use water quality objective Enterococcus, Zero out of 57 Geomean samples exceeded the Shellfish Harvesting Beneficial Use Objective for Total Coliform, and 94 out of 331 samples exceeded the Single Sample Maximum Shellfish Harvesting Beneficial Use Objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Thirty-nine of 256 samples exceeded the recreational use water quality objective for Enterococcus,

16 out of 210 samples exceeded the objective for fecal Coliform, and Four out of 256 samples exceeded the Objective for Total Coliform, and this exceeds the allowable limit listed in Table 4.2 (at a four percent exceedance percentage \hat{A} – AB411) of the Listing Policy

5. Twelve of 105 geo-metric mean calculations exceeded the recreational use geo-metric mean Objective for Enterococcus, Zero out of 97 geo-metric omean samples exceeded the objective for Fecal Coliform, and Three out of 55 geo-metric mean samples exceeded the objective for Total Coliform. This exceeds the allowable limit in Table 4.2 (at a four percent exceedance percentage \hat{A} – AB411).

6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID:	330
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	40
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 36 out of 233 samples exceeding the single sample maximum for enterococci, 40 out of 138 exceedances of the geomean enterococci (40), and 11 out of 188 exceedances of the geomean for total coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Title 17 C.C.R. Section 7958 states that based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or</p> <p>(B) 10,000 total coliform bacteria per 100 milliliters; or</p> <p>(C) 400 fecal coliform bacteria per 100 milliliters; or</p> <p>(D) 104 enterococcus bacteria per 100 milliliters.</p> <p>Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters; or</p> <p>(B) 200 fecal coliform bacteria per 100 milliliters; or</p> <p>(C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Station ID # EH120: San Diego Bay Shoreline at J Street.
Temporal Representation:	04/05/2000-10/26/2005.
Environmental Conditions:	

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID:	75629
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 57 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bayside Park at J Street (EH-120) site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID:	75628
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for San Diego Bay Shoreline, at Bayside Park (J Street) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego Bay Shoreline, at Bayside Park (J Street) was collected at 1 monitoring site [EH-120]
Temporal Representation:	Data was collected over the time period 4/2/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Bayside Park (J Street)	

LOE ID:	77694
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 57 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline, at Bayside Park (J Street).
Temporal Representation:	The samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Bayside Park (J Street)	

LOE ID:	75625
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 57 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bayside Park at J Street (EH-120) site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID:	75627
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 57 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bayside Park at J Street (EH-120) site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria
San Diego Bay Shoreline, at Bayside Park (J Street)

Region 9

LOE ID: 27258

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 265
Number of Exceedances: 43

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected with 43 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria
San Diego Bay Shoreline, at Bayside Park (J Street)

Region 9

LOE ID: 27257

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7
Number of Exceedances: 1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 217 single samples were collected with 7 samples correlated with a storm event. One of the 7 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Bayside Park (J Street)	

LOE ID:	27256
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	217
Number of Exceedances:	17
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 217 single samples were collected with 17 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID:	27255
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected with 9 samples correlated with a storm event. One of the 9 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID: 27254

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 265
Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected with five samples exceeding the single sample water quality objective.
Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID: 27253

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected with 9 samples correlated with a storm event. Six of the 9 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria
San Diego Bay Shoreline, at Bayside Park (J Street)

Region 9

LOE ID:	27262
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected with 55 monthly geomeans calculated. Twelve of the 55 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID:	27261
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 217 single samples were collected and 47 geomeans calculated. None of the 47 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID: 27260

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 55
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected with 55 monthly geomeans calculated. Three of the 55 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID: 27259

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected with 9 samples correlated with a storm event. Four of the 9 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria
San Diego Bay Shoreline, at Bayside Park (J Street)

Region 9

LOE ID:	27252
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	265
Number of Exceedances:	93
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 265 single samples were collected with 93 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Bayside Park (J Street)

LOE ID:	30673
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	256
Number of Exceedances:	39
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected of which 256 are dry weather (AB411) samples with 39 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria
San Diego Bay Shoreline, at Bayside Park (J Street)

Region 9

LOE ID: 30880

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 256
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 265 single samples were collected of which 256 are dry weather (AB411) samples with four of those samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria
San Diego Bay Shoreline, at Bayside Park (J Street)

Region 9

LOE ID: 30774

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	210
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 217 single samples were collected of which 210 are dry weather (AB411) samples with 16 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria
San Diego Bay Shoreline, at Bayside Park (J Street)

Region 9

LOE ID:	31328
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through April 2007. A total of 248 dry month (April through October) single samples were collected with 48 dry month geomeans calculated. Twelve of the 48 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

Objective/Criterion Reference: 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.

Temporal Representation: Samples were collected from May 1999 through April 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Bayside Park (J Street)	

LOE ID: 31329

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 40

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through April 2007. A total of 200 dry month (April through October) single samples were collected with 40 dry month geomeans calculated. None of the 40 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.

Temporal Representation: Samples were collected from May 1999 through April 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria**Region 9****San Diego Bay Shoreline, at Bayside Park (J Street)**

LOE ID:	31330
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through April 2007. A total of 248 dry month (April through October) single samples were collected with 48 dry month geomeans calculated. Three of the 48 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bayside Park (J Street), San Diego, California. Station identification number is EH-120.
Temporal Representation:	Samples were collected from May 1999 through April 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43599, Indicator Bacteria**Region 9****San Diego Bay Shoreline, at Bayside Park (J Street)**

LOE ID:	29803
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	122
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 122 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Beach advisories were from Bayside Park (J Street) located in San Diego Bay.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at South Bay Power Plant](#)
Water Body ID: CAB9091200020020307125116
Water Body Type: Bay & Harbor

DECISION ID	33342	Region 9
San Diego Bay Shoreline, at South Bay Power Plant		

Pollutant: Chlorine
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record. Information is not backed with data. Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33342, Chlorine	Region 9
San Diego Bay Shoreline, at South Bay Power Plant	

LOE ID: 333
Pollutant: Chlorine
LOE Subgroup: Testimonial Evidence
Matrix: Not Specified
Fraction: None
Beneficial Use: Industrial Service Supply
Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: From the letter from San Diego Baykeeper, dated 06/14/2004: San Diego Baykeeper, the Environmental Health Coalition, and other local environmental groups have also presented site-specific studies on the area that have shown, year after year, that the beneficial uses in the South Bay are not being protected, and that the waters suffer from impairment by heat, chlorine, and copper. (San Diego Baykeeper, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	No non-numeric objective is included in the criteria used (Basin Plan, CTR, etc.)
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The site is South San Diego Bay at South Bay Power Plant.
Temporal Representation:	The letter reporting this exceedance is dated 06/14/2004, and mentions that this has been the case "year after year."
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33048	Region 9
San Diego Bay Shoreline, at South Bay Power Plant		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record. Information is not backed with data. Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33048, Copper	Region 9
San Diego Bay Shoreline, at South Bay Power Plant	

LOE ID:	334
Pollutant:	Copper
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Industrial Service Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From the letter from San Diego Baykeeper dated 06/14/2004: San Diego Baykeeper, the Environmental Health Coalition, and other local environmental groups have also presented site-specific studies on the area that have shown, year after year, that the beneficial uses in the South Bay are not being protected, and that the waters suffer from impairment by heat, chlorine, and copper. (San Diego Baykeeper, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Objectives for copper (from CTR) are numeric. Placeholder reference 2006 303(d)
Evaluation Guideline:	From the CTR, saltwater acute standard is 4.8 ppb and the saltwater chronic standard is 3.1 ppb. US Fish and Wildlife Services biological effects criteria for the support of aquatic life is 15 ppm for wet weight. The Effects Range Median for Marine and Estuary Sediment is 270 ppm. From the Ocean Plan, for the protection of Marine Aquatic Life, the 6-month median is 3 ppb, the daily maximum is 12 ppb and the instantaneous maximum is 30 ppb.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	The letter from San Diego Baykeeper, written on June 14, 2004, notes that exceedances occur for South San Diego Bay at South Bay Power Plant. The letter does not specifically mention which beneficial uses are not supported by the water quality at this location.
Temporal Representation:	The letter documenting this problem was dated June 14, 2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	32664	Region 9
San Diego Bay Shoreline, at South Bay Power Plant		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record. Information is not backed with data. Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).</p>
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Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 32664, Oxygen, Dissolved	Region 9
San Diego Bay Shoreline, at South Bay Power Plant	

LOE ID:	332
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From San Diego BayKeeper Memo, dated 06/14/2004: We recommend listing for excess

temperature and low dissolved oxygen, based on a report prepared for the San Diego Bay Council: Recommended Options For Maximum Water Temperature Limits And Minimum Dissolved Oxygen Limits At A Compliance Point For Discharges From The South Bay Power Plant In San Diego Bay, Necessary To Protect Beneficial Uses, Richard F. Ford, Ph.D., Professor Emeritus of Biology at San Diego State University, April, 2003. (San Diego Baykeeper, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The area is reported as South San Diego Bay at South Bay Power Plant.
Temporal Representation: The cited report is dated April 2003. The letter submitted in response to public solicitation is dated June, 14 2004.

Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

DECISION ID	33408	Region 9
San Diego Bay Shoreline, at South Bay Power Plant		

Pollutant: Temperature, water
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record. Information is not backed with data. Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33408, Temperature, water	Region 9
San Diego Bay Shoreline, at South Bay Power Plant	

LOE ID: 331

Pollutant: Temperature, water
 LOE Subgroup: Testimonial Evidence
 Matrix: Not Specified
 Fraction: None

Beneficial Use:	Industrial Service Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Testimonial evidence was provided by the San Diego Bay Keeper. The recommendation for a listing for excess temperature was based on a report prepared for the San Diego Bay Council. This testimony also cites that other studies done by San Diego Baykeeper, the Environmental Health Coalition, and other local environmental groups have also presented site-specific studies on the area that have shown, year after year, that the beneficial uses in the South Bay are not being protected, and that the waters suffer from impairment by heat. (San Diego Baykeeper, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The terms and conditions of the State Board's "Water Quality Control Plan for Ocean Waters of California" (Ocean Plan), "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California" (Thermal Plan), and any revisions thereto are incorporated into the Basin Plan by reference. The terms and conditions of the Ocean Plan and Thermal Plan apply to the ocean waters within this Region.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Testimonial evidence applies to San Diego Bay at the South Bay Power Plant.
Temporal Representation:	The document in which the testimonial was included was dated June 14, 2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay](#)
Water Body ID: CAB9101000019990210132422
Water Body Type: Bay & Harbor

DECISION ID	33669	Region 9
San Diego Bay		

Pollutant: PCBs (Polychlorinated biphenyls)
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Contaminated Sediments | Dredging | Historic Land Management Activities | Illegal dumping | Source Unknown | Spills | Urban Runoff/Storm Sewers
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is no sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to Section 3.4 of the listing policy, there is a published State of California Office of Environmental Health Hazard Assessment Health Advisory for Eating Fish From San Diego Bay due to PCBs and Mercury.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33669, PCBs (Polychlorinated biphenyls)	Region 9
San Diego Bay	

LOE ID: 95636

Pollutant: PCBs (Polychlorinated biphenyls)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 0

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and through the Surface Water Ambient Monitoring Program. These data were collected from 1999-2009 and were assessed by State of California staff at the Office of Environmental Health Hazard Assessment. These data are available in the California Environmental Data Exchange Network Database.
Data Reference:	Toxic Substances Monitoring Program data for years 1992-2002 and Coastal Fish Contamination Program for years 1 and 2. State Water Resources Control Board Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	State of California Office of Environmental Health Hazard Assessment Health Advisory and Guidelines for Eating Fish From San Diego Bay. October 2013. Section 3.4 of the Listing Policy Specifically states: "3.4 Health Advisories A water segment shall be placed on the section 303(d) list if a health advisory against the consumption of edible resident organisms, or a shellfish harvesting ban has been issued by the Office of Environmental Health Hazard Assessment (OEHHA), or Department of Health Services and there is a designated or existing fish consumption beneficial use for the segment. In addition, water segment-specific data must be available indicating the evaluation guideline for tissue is exceeded."
Guideline Reference:	This waterbody has a health advisory against the consumption of edible resident fish due to elevated levels of PCBs in fillet tissue. Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and Surface Water Ambient Monitoring Program.
Temporal Representation:	Representative samples of locally abundant species were collected from 1999 to 2009.
Environmental Conditions:	
QAPP Information:	Samples collected and analyzed by State of California monitoring programs. Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000. Screening Study of Bioaccumulation on the California Coast Quality Assurance Program Plan 2009.
QAPP Information Reference(s):	Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000 Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA.

LOE ID:	75622
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33669, PCBs (Polychlorinated biphenyls)

Region 9

San Diego Bay

LOE ID:	336
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	18
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Eleven out of 11 samples exceeded the screening value. All 11 samples were filet composites. Six out of the 11 samples were spotted sand bass collected at least once at each station. The remaining species included barred sand bass, black surfperch, diamond turbot, and shiner surfperch. All samples exceeded guideline (TSMP, 2002). Seven out of 7 samples exceeded. Whole fish/Halibut. Bight 98 Data (City of San Diego, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	20 ng/g OEHHA Screening Value (Brodberg & Pollock, 1999).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Four stations were sampled: 5th Avenue Marina Pier, Coronado Pier, J Street Pier - Chula Vista, and Shelter Island Pier.
Temporal Representation:	Samples were collected in February, March, April, May, November 1999 and March 2000.
Environmental Conditions:	
QAPP Information:	CFCP 1998 Year 1 QA Summary: Pesticides and PCBs. California Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.
QAPP Information Reference(s):	

DECISION ID	52947	Region 9
San Diego Bay		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the two samples exceed the guideline based on an assumption of ten percent of total arsenic being inorganic in form. Additional information regarding this assumption is needed given the small sample size for the waterbody.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of two samples exceed the guideline, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. This exceedance rate is based on an assumption of ten percent of total arsenic being inorganic in form. The accuracy of this assumption is unknown.
4. Pursuant to section 3.11 of the Listing Policy, additional data and information are available indicating that standards are not met. Additional information regarding the validity of ten percent of total arsenic being in inorganic form is needed, especially given the small sample size for the waterbody (n = 2). There is insufficient information regarding Mytilus arsenic ratios in order to make an accurate beneficial use assessment.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52947, Arsenic
San Diego Bay**

Region 9

LOE ID:	75595
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Both samples exceeded the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52948	Region 9
San Diego Bay		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52948, Cadmium	Region 9
San Diego Bay	

LOE ID:	75600
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The two samples did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52949	Region 9
San Diego Bay		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52949, Chlordane
San Diego Bay**

Region 9

LOE ID:	75601
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	52950	Region 9
San Diego Bay		

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52950, Chlorpyrifos	Region 9
San Diego Bay	

LOE ID: 75602

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52951	Region 9
San Diego Bay		

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52951, Dieldrin
San Diego Bay

Region 9

LOE ID: 75604

Pollutant: Dieldrin
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Shellfish Harvesting

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21

Guideline Reference:	g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008) Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52952	Region 9
San Diego Bay		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52952, Endosulfan	Region 9
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San Diego Bay

LOE ID:	75605
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID
San Diego Bay

52953

Region 9

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52953, Endrin San Diego Bay

Region 9

LOE ID:	75606
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52954	Region 9
San Diego Bay		
Pollutant:	Heptachlor epoxide	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and	

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52954, Heptachlor epoxide

Region 9

San Diego Bay

LOE ID:	75612
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The samples did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52955, Hexachlorobenzene/ HCB	Region 9
San Diego Bay	

LOE ID:	75613
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52956	Region 9
San Diego Bay		
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum 	

of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52956, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Diego Bay

LOE ID:	75614
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	

QAPP Information:

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	52957	Region 9
San Diego Bay		

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceeds the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52957, Mirex	Region 9
San Diego Bay	

LOE ID:	75618
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys

Data Used to Assess Water Quality:	The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID		52961	Region 9
San Diego Bay			
Pollutant:	Selenium		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	New Decision		
Revision Status	Revised		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>		

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52961, Selenium
San Diego Bay**

Region 9

LOE ID:	75623
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The two samples did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.

Environmental Conditions:**QAPP Information:**

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at:
<http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	52962	Region 9
San Diego Bay		

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeds the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52962, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)	Region 9
San Diego Bay	

LOE ID: 75624

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Shellfish Harvesting

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	53136	Region 9
San Diego Bay		
Pollutant:	Mercury	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Atmospheric Deposition Contaminated Sediments Historic Land Management Activities Other Urban Runoff Source Unknown	
Expected TMDL Completion Date:	2027	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.	

Two lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to Section 3.4 of the listing policy, there is a published State of California Office of Environmental Health Hazard Assessment Health Advisory for Eating Fish From San Diego Bay due to PCBs and Mercury.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 53136, Mercury
San Diego Bay**

Region 9

LOE ID:	95630
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and through the Surface Water Ambient Monitoring Program. These data were collected from 1999-2009 and were assessed by State of California staff at the Office of Environmental Health Hazard Assessment. These data are available in the California Environmental Data Exchange Network Database.
Data Reference:	Toxic Substances Monitoring Program data for years 1992-2002 and Coastal Fish Contamination Program for years 1 and 2. State Water Resources Control Board Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	State of California Office of Environmental Health Hazard Assessment Health Advisory and Guidelines for Eating Fish From San Diego Bay. October 2013. Section 3.4 of the Listing Policy Specifically states: "3.4 Health Advisories A water segment shall be placed on the section 303(d) list if a health advisory against the consumption of edible resident organisms, or a shellfish harvesting ban has been issued by the Office of Environmental Health Hazard Assessment (OEHHA), or Department of Health

Services and there is a designated or existing fish consumption beneficial use for the segment. In addition, water segment-specific data must be available indicating the evaluation guideline for tissue is exceeded."

This waterbody has a health advisory against the consumption of edible resident fish due to elevated levels of mercury in fillet tissue.

Guideline Reference:

[Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001](#)

Spatial Representation:

Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and Surface Water Ambient Monitoring Program.

Temporal Representation:

Representative samples of locally abundant species were collected from 1999 to 2009.

Environmental Conditions:

QAPP Information:

Samples collected and analyzed by State of California monitoring programs. Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000. Screening Study of Bioaccumulation on the California Coast Quality Assurance Program Plan 2009.

QAPP Information Reference(s):

[Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000](#)
[Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program \(SWAMP\). California State Water Resources Control Board, Sacramento, CA.](#)

Line of Evidence (LOE) for Decision ID 53136, Mercury

Region 9

San Diego Bay

LOE ID: 75617

Pollutant: Mercury
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Shellfish Harvesting

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The two samples did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline: The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)

Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52959	Region 9
San Diego Bay		

Pollutant: **PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the two samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of two samples exceed the guideline, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52959, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
San Diego Bay	

LOE ID:	75619
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite samples were collected from sites SDCB - San Diego Bay Coronado Bridge and SDHI - San Diego Bay Harbor Island.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/5/2007 and 12/10/2007.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceeded the 3.1 ppb CTR chronic saltwater criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33415, Copper
San Diego Bay

Region 9

LOE ID:	335
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	<p>Data were collected by the RWQCB in 03/20/2004. None of the 3 samples were in exceedance of either the acute or chronic criteria.</p> <p>All 3 samples collected on 03/15/2004 in the ocean channel near ballast point in the middle of the channel between buoys 11 and 12 met both acute and chronic standards. One sample was collected at the same location on 03/20/2004. Both acute and chronic standards were met. (SDRWQCB, 2004c)</p>
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the CTR: The dissolved copper acute saltwater criterion is 4.8 ppb. The dissolved copper chronic criterion is 3.1 ppb. This criteria is more stringent or as stringent as the other criteria found.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the San Diego Bay in the open ocean south of buoy 3 and tip of Point Loma.

Samples were also collected in the San Diego Bay in the ocean channel near ballast point in the middle of the channel between buoys 11 and 12.

Samples were collected on 03/20/2004 and 03/15/2004.

Temporal Representation:

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Glorietta Bay](#)
Water Body ID: CAB9101000020041209185339
Water Body Type: Bay & Harbor

DECISION ID	43806	Region 9
San Diego Bay Shoreline, at Glorietta Bay		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Twenty-One lines of evidence are available in the administrative record to assess this pollutant. Four of the 215 samples exceed single sample maximum objective the water quality objective, and Zero out of 113 monthly geomean samples exceeded the water quality objective for enterococcus. Zero of the 178 samples exceeded the Recreational Beneficial use Single Sample Maximum Objective, and Zero out of 54 samples exceeded the geomean water quality objective for fecal coliform. Sixteen of the 215 samples exceed the Total Coliform single sample ocean plan water quality objective for Shellfish Harvesting, and Zero out of 107 samples exceeded the Recreational Beneficial use single sample maximum Basin Plan Objective for Total Coliform.

The coastal beach at this water segment is identified as an AB411 beach. To comply with the requirements of AB411 the dry weather data collected during the time frame of April 1st to October 31st is assessed using a four percent exceedance percentage, as described in section 3.3 and 4.3 of the Listing Policy. An assessment for dry weather single sample and the geometric mean calculation was conducted and there are two additional line of evidence available in the administrative record. Four of 209 dry weather single samples and zero of 53 geometric mean calculations exceeded the criteria for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 215 samples exceed single sample maximum objective the water quality objective, and Zero out of 113 monthly geomean samples exceeded the water quality objective for enterococcus. Zero of the 178 samples exceeded the Recreational Beneficial use Single Sample Maximum Objective, and Zero out of 54 samples exceeded the geomean water quality objective for fecal coliform. Sixteen of the 215 samples exceed the Total Coliform single sample ocean plan water quality objective for Shellfish Harvesting, and Zero out of 107 samples exceeded the Recreational Beneficial use single sample maximum Basin Plan Objective for Total Coliform. and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Four of 209 dry weather single samples exceeded the criteria for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy

5. Zero of 53 geometric mean calculations exceeded the criteria for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.

6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	30881
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	209
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected of which 209 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	31327
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 205 dry month (April through October) single samples were collected with 53 dry month geomeans calculated. None of the 53 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	31326
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 171 dry month (April through October) single samples were

	collected with 42 dry month geomeans calculated. None of the 42 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID:	31325
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 205 dry month (April through October) single samples were collected with 53 dry month geomeans calculated. None of the 53 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	27331
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	215
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with 4 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	27327
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	215
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with zero sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID:	30775
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	173
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 178 single samples were collected of which 173 are dry weather (AB411) samples with no sample exceeding the single sample water quality

Data Reference:	objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	30674
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	209
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected of which 209 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID:	29804
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were seven beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Beach advisories were from Glorietta Bay located in San Diego Bay.
Temporal Representation:	The beach advisories covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality

Assessment/Quality Control document
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID: 27326

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 6
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with 6 samples correlated with a storm event. One of the 6 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID: 27330

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 178 single samples were collected with 5 samples correlated with a storm event. No sample exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID:	27325
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	215
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with 16 samples exceeded the single sample water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of Orange, Quality Assurance/Quality Control Manual, February 2004
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	75637
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 54 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Glorietta Bay site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	75636
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	65
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for San Diego Bay Shoreline, at Glorietta Bay to determine beneficial use support and results are as follows: 2 of 65 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego Bay Shoreline, at Glorietta Bay was collected at 1 monitoring site [Glorietta Bay]
Temporal Representation:	Data was collected over the time period 1/18/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	75635
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 54 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Glorietta Bay site.
Temporal Representation: Samples were collected from January 2008 to August 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID: 75634

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 54
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 54 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Glorietta Bay site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID: 77696

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 54
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Zero of the 54 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline, at Glorietta Bay.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:	27335
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with 59 monthly geomeans calculated. None of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID: 27334

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 49
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 178 single samples were collected and 49 geomeans calculated. None of the 49 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID: 27333

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with 59 monthly geomeans calculated. None of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria
San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID:	27332
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID:

27329

Pollutant:

Fecal Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

178

Number of Exceedances:

0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 178 single samples were collected with no sample exceeding the single sample water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43806, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Glorietta Bay

LOE ID: 27328

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 215 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Glorietta Bay, San Diego, California. Station identification number is EH-080.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

DECISION ID 33220
San Diego Bay Shoreline, at Glorietta Bay

Region 9

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An adequate number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements in section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 3 samples exceeded the 3.1 ppb CTR chronic saltwater criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33220, Copper San Diego Bay Shoreline, at Glorietta Bay

Region 9

LOE ID:	337
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected in 05/2004. Two of 3 samples were in exceedance of the chronic standard. The location where there were no exceedances was next to Buoy 13; near Avenida de las Arenas (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the saltwater chronic standard is 3.1 ppb, and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the San Diego Bay Shoreline, Glorietta Bay, in front of Coronado Yacht Club, halfway down the main axis of Glorietta Bay, and next to Buoy 13; near Avenida de las Arenas.

Temporal Representation:

Samples were collected on 05/20/2004.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Silver Strand Beach \(bayside\)](#)
Water Body ID: CAB9101000020041209190503
Water Body Type: Bay & Harbor

DECISION ID	44399	Region 9
San Diego Bay Shoreline, at Silver Strand Beach (bayside)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for enterococcus.

The coastal beach at this water segment is identified as an AB411 beach. To comply with the requirements of AB411 the dry weather data collected during the time frame of April 1st to October 31st is assessed using a four percent exceedance percentage, as described in section 3.3 and 4.3 of the Listing Policy. An assessment for dry weather single sample and the geometric mean calculation was conducted and there are two additional line of evidence available in the administrative record. Zero of 203 dry weather single samples and zero of 54 geometric mean calculations exceeded the criteria for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy. None of 200 single samples and none of 54 geometric mean calculations exceeded the Total Coliform objective for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy. Zero of 165 dry weather single samples and zero of 43 geometric mean calculations exceeded the Fecal Coliform objective for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 207 samples exceeded the enterococcus water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Zero of 203 dry weather single samples exceeded the criteria for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy
5. Zero of 53 geometric mean calculations exceeded the criteria for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.

6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)**

Region 9

LOE ID:	27318
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	169
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 169 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)**

Region 9

LOE ID:	75641
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 18 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Silver Strand (bayside) site.
Temporal Representation:	Samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria	Region 9
San Diego Bay Shoreline, at Silver Strand Beach (bayside)	

LOE ID:	27316
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	205
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 205 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID: 31323

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 43

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 163 dry month (April through October) single samples were collected with 43 dry month geomeans calculated. None of the 43 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.

Temporal Representation: Samples were collected from May 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID:	30776
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	165
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 169 single samples were collected of which 165 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID:	30675
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	203
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 207 single samples were collected of which 203 are dry weather (AB411) samples with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach (bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Silver Strand Beach (bayside)

LOE ID:	75638
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 18 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at the Silver Strand (bayside) site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Silver Strand Beach (bayside)

LOE ID:	75639
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 18 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Silver Strand (bayside) site.
Temporal Representation:	Samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria**Region 9****San Diego Bay Shoreline, at Silver Strand Beach (bayside)**

LOE ID:	75640
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for San Diego Bay Shoreline, at Silver Strand Beach (bayside) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego Bay Shoreline, at Silver Strand Beach (bayside) was collected at 1 monitoring site [Silver Strand (bayside)]

Temporal Representation: Data was collected over the time period 4/2/2008-9/17/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID: 31324

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 54
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 198 dry month (April through October) single samples were collected with 54 dry month geomeans calculated. None of the 54 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.

Temporal Representation: Samples were collected from May 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID: 30882

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	200
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May1999 through December 2007. A total of 205 single samples were collected of which 200 are dry weather (AB411) samples and none of those samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID:	77697
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the eighteen samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin ¹ states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline, at Silver Strand Beach (bayside).
Temporal Representation:	The samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Silver Strand Beach (bayside)

LOE ID:	29808
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Spatial Representation: Beach advisories were from Glorietta Bay located in San Diego Bay.
Temporal Representation: The beach advisories covers the time frame of January January 2001 to December 2007.
Environmental Conditions:
QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Silver Strand Beach (bayside)

LOE ID: 31322

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 54
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 200 dry month (April through October) single samples were collected with 54 dry month geomeans calculated. None of the 54 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation: Samples were collected from May 1999 through October 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Silver Strand Beach (bayside)

LOE ID: 27315

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 205 single samples were collected with 5 samples correlated with a storm event. None of the 5 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID:	27314
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	205
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 205 single samples were collected with 16 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Silver Strand Beach (bayside)

LOE ID:	27321
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 207 single samples were collected with four samples correlated with a storm event. None of the four samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.

Temporal Representation:

Samples were collected from May 1999 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria

Region 9

San Diego Bay Shoreline, at Silver Strand Beach (bayside)

LOE ID: 27320

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 207
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 207 single samples were collected with no samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand State Beach (bayside), San Diego, California. Station identification number is EH-090.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria**Region 9****San Diego Bay Shoreline, at Silver Strand Beach (bayside)**

LOE ID:	27319
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 169 single samples were collected with four samples correlated with a storm event. None of the samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria**Region 9****San Diego Bay Shoreline, at Silver Strand Beach (bayside)**

LOE ID:	27324
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	71
Number of Exceedances:	6

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 207 single samples were collected with 71 monthly geomeans calculated. Six of the 71 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID:	27323
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	71
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 169 single samples were collected and 71 geomeans calculated. None of the 71 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID: 27322

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 71

Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 205 single samples were collected with 71 monthly geomeans calculated. Six of the 71 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand State Beach(bayside), San Diego, California. Station identification number is EH-090.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44399, Indicator Bacteria
San Diego Bay Shoreline, at Silver Strand Beach (bayside)

Region 9

LOE ID: 27317

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 205 single samples were collected with 5 samples correlated with a storm event. None of the 5 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand State Beach (bayside), San Diego, California. Station identification number is EH-090.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, at Coronado Cays](#)
Water Body ID: CAB9101000020041209191852
Water Body Type: Bay & Harbor

DECISION ID	33341	Region 9
San Diego Bay Shoreline, at Coronado Cays		

Pollutant: Copper
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An adequate number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements in section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 8 samples exceeded the 3.1 ppb CTR chronic saltwater criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33341, Copper	Region 9
San Diego Bay Shoreline, at Coronado Cays	

LOE ID: 338
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Estuarine Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Seven of 8 samples were in exceedance of the chronic standards. The location with no exceedances was at the Southern-most leg (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the saltwater acute standard for copper is 4.8 ppb and the saltwater chronic standard is 3.1 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Diego Bay shoreline, Coronado Cays, at the Southern-most leg, near Blue Anchor Cays street, next to the causeway, mid-area of Coronado Cays-south of causeway, next to sandy beach; NE leg and at the intersection of two waterways; North end of Cays.
Temporal Representation:	Samples were collected on 05/20/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Imperial Beach Pier](#)
Water Body ID: CAC9101000020050918172745
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43312	Region 9
Pacific Ocean Shoreline, Imperial Beach Pier		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 83 of the 331 samples exceed the water quality objective for total coliform of a geomean of 70/100 ml in a 30-day period for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 83 of the 331 samples exceed the water quality objective for total coliform of a geomean of 70/100 ml in a 30-day period for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Imperial Beach Pier	

LOE ID:	27779
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 225 single samples were collected with 30 samples correlating with a storm event. Sixteen of the 30 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID:	30571
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	195
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 225 single samples were collected of which 195 are dry weather (AB411) samples with 9 samples exceeding the single sample water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID:	27780
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 225 single samples were collected with 44 monthly geomeans calculated. Four of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID: 27771

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 224
Number of Exceedances: 69

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected with 69 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Pacific Ocean Shoreline at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID: 27772

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 30
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 224 single samples were collected with 30 samples correlated with a storm event. Four of the 30 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID:	27777
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 153 single samples were collected and 30 geomeans calculated. Three of the 30 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID: 27778

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 225

Number of Exceedances: 25

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 225 single samples were collected with 25 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID: 27776

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 153 single samples were collected with 24 samples correlated with a storm event. Sixteen of the 24 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID:	27768
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	224
Number of Exceedances:	8

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected with eight samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID:	27773
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	30
Number of Exceedances:	25
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 224 single samples were collected with 30 samples correlating with a storm event. Twenty five of the 30 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.

Temporal Representation:

Samples were collected from February 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID: 27774

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at the Pacific Ocean Shoreline at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID:	27775
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	31
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 153 single samples were collected with 31 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID:	28246
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were three beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at

ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Bacteriological monitoring samples were collected at Imperial Beach Fishing Pier, Imperial Beach, CA.

Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID: 31290

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 195 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. Zero of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria
Pacific Ocean Shoreline, Imperial Beach Pier

Region 9

LOE ID:	31291
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 68 dry month (April through October) single samples were collected with 16 dry month geomeans calculated. One of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID:	31292
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 116 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Pacific Ocean Shoreline at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Imperial Beach Pier**

LOE ID:	30807
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	194
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected of which 194 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID:	30693
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	129
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 153 single samples were collected of which 129 are dry weather (AB411) samples with 15 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier, Imperial Beach, California. Department of Environmental Health identification number is EH-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Imperial Beach Pier**

LOE ID:	77623
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	90
Number of Exceedances:	21
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-one of the 90 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Imperial Beach Pier at stations Imperial Beach Pier and Imperial Beach Boulevard.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Imperial Beach Pier**

LOE ID:	74856
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 90 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Imperial Beach Pier	

LOE ID:	74857
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 90 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Imperial Beach Pier	

LOE ID:	74877
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	107
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Imperial Beach Pier to determine beneficial use support and results are as follows: 14 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Imperial Beach Pier was collected at 2 monitoring sites [Imperial Beach Boulevard, Imperial Beach Pier]
Temporal Representation:	Data was collected over the time period 1/17/2008-8/9/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43312, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID:	74878
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 90 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Imperial Beach Pier site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID

49768

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 12/8/07, 12/13/08, and 12/12/09 for this water body. The total weight of trash (lbs) collected on these dates was 592. However, using the metric, Coastkeeper classified this water body as high for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.3. This process is scientifically defensible and reproducible.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49768, Trash

Region 9

Pacific Ocean Shoreline, Imperial Beach Pier

LOE ID:	74879
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 12/8/07, 12/13/08, and 12/12/09 for this water body. The total weight of trash (lbs) collected on these dates was 592. However, using the metric, Coastkeeper classified this water body as high for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Imperial Beach Pier.
Temporal Representation:	Three cleanups occurred on 12/8/07, 12/13/08, and 12/12/09.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

DECISION ID	33949	Region 9
Pacific Ocean Shoreline, Imperial Beach Pier		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 4 samples exceeded the OEHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33949, PCBs (Polychlorinated biphenyls)		Region 9
Pacific Ocean Shoreline, Imperial Beach Pier		

LOE ID:	390
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Three out of 4 samples exceeded. All 4 samples were filet composites. Two samples of barred surfperch and two of walleye surfperch were collected. All exceeded guideline except one walleye sample (TSMP, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	San Diego RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	20 ng/g (OEHHA Screening Value).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station was sampled on the Imperial Beach Pier.
Temporal Representation:	Samples were collected in March 1999 and April 2000.
Environmental Conditions:	
QAPP Information:	CFCP 1998 Year 1 QA Summary - Pesticides and PCBs. California Department of Fish and Game. CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Aliso Creek \(mouth\)](#)
Water Body ID: CAE9011300019990208095945
Water Body Type: Estuary

DECISION ID	61526	Region 9
Aliso Creek (mouth)		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 61526, Arsenic	Region 9
Aliso Creek (mouth)	

LOE ID: 72978
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 6

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the six samples exceed the criteria for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47591	Region 9
Aliso Creek (mouth)		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47591, Cadmium

Region 9

Aliso Creek (mouth)

LOE ID:	72980
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceed the hardness adjusted criteria for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

47592

Region 9

Aliso Creek (mouth)

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47592, Chromium

Region 9

Aliso Creek (mouth)

LOE ID:	72981
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceed the hardness adjusted criteria for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 47593		Region 9
Aliso Creek (mouth)		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a since line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47593, Copper		Region 9
Aliso Creek (mouth)		
LOE ID:	72982	
Pollutant:	Copper	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	

Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceed the hardness adjusted criteria for copper.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May, October and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47594	Region 9
Aliso Creek (mouth)		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 8 samples exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support 	

rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47594, Lead
Aliso Creek (mouth)**

Region 9

LOE ID:	72983
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceed the hardness adjusted criteria for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 47595
Aliso Creek (mouth)**

Region 9

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47595, Nickel
Aliso Creek (mouth)

Region 9

LOE ID:	72984
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceed the hardness adjusted criteria for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47596	Region 9
Aliso Creek (mouth)		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of 6 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 6 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47596, Selenium	Region 9
Aliso Creek (mouth)	

LOE ID:	72985
Pollutant:	Selenium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the six samples exceeded the criterion for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47597	Region 9
Aliso Creek (mouth)		
Pollutant:	Silver	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 	

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47597, Silver

Region 9

Aliso Creek (mouth)

LOE ID:	72986
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceed the hardness adjusted criteria for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).
Temporal Representation:	Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.
Environmental Conditions:	Approximately 38% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 47598

Region 9

Aliso Creek (mouth)

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47598, Zinc

Region 9

Aliso Creek (mouth)

LOE ID: 72987

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the eight samples exceed the hardness adjusted criteria for zinc.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness

dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation:

Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (stations ACM-1 and ACM-1d).

Temporal Representation:

Samples were collected from station, ACM-1 on September and December of 2006 and January of 2008. Samples were collected from station, ACM-1d in October 2007, May and December 2008, and April of 2009.

Environmental Conditions:

Approximately 38% of the samples were collected after a storm event.

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID

62899

Region 9

Aliso Creek (mouth)

Pollutant:

Toxicity

Final Listing Decision:

List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:

New Decision

Revision Status

Revised

Sources:

Source Unknown

Expected TMDL Completion Date:

2027

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. With the latest data, three of three samples exceed the toxicity criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, three of three samples exceed the criteria for toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 62899, Toxicity

Region 9

Aliso Creek (mouth)

LOE ID:

95675

Pollutant:

Toxicity

LOE Subgroup:

Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to test for toxicity. Three of the nine samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass and survival and Purple Urchin development and fertilization.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at station ACM1 in the ocean close to Aliso Creek Mouth.
Temporal Representation:	The samples were collected from September 2006 to January 2008.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

DECISION ID	34761	Region 9
Aliso Creek (mouth)		
Pollutant:	Indicator Bacteria	
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)	
TMDL Project Code:	169	
Date TMDL Approved by USEPA:	06/22/2011	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.	
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.	

Aliso Creek (mouth)

LOE ID:	4443
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Juan Creek \(mouth\)](#)
Water Body ID: CAE9012000019990208150457
Water Body Type: Estuary

DECISION ID	62982	Region 9
San Juan Creek (mouth)		

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the water quality criteria for Se for the protection of marine aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the water quality criteria for Se for the protection of marine aquatic life, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 62982, Selenium	Region 9
San Juan Creek (mouth)	

LOE ID: 95676
Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Marine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the five samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1 on the Pacific Coast at the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1 on 12/27/06, 10/10/07, 1/24/08, 5/13/08 and 9/30/08
Environmental Conditions:	Samples were collected from stormwater runoff on 12/27/06 and 1/24/08, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 62916		Region 9
San Juan Creek (mouth)		
Pollutant:	Arsenic	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	
Line of Evidence (LOE) for Decision ID 62916, Arsenic		Region 9

San Juan Creek (mouth)

LOE ID: 95672

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Marine Habitat
Aquatic Life Use: Wildlife Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Orange County Public Works
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:

Water Quality Objective/Criterion: Marine Communities shall not be degraded (2009 California Ocean Plan)
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline: California's Ocean Plan, Table B, 6-month median concentration, shall not exceed 8 ug/L.
Guideline Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Spatial Representation: Samples collected from SJC-1 at San Juan Creek mouth.
Temporal Representation: Samples collected from 12/2006-9/2008.

Environmental Conditions:
QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	62918	Region 9
San Juan Creek (mouth)		

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

[One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 62918, Chlorpyrifos

Region 9

San Juan Creek (mouth)

LOE ID:	95665
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Zero of the five samples exceeded the Criteria Continuous Concentration for Chlorpyrifos of 9 ng/L. The reporting limit for the non-detect sample was 10 ng/L which is greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at San Juan Creek mouth at SJC1.
Temporal Representation:	Samples were collected at SJC1 in 12/2006 - 9/2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

62919

Region 9

San Juan Creek (mouth)

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the five samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of five samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 62919, Chromium
San Juan Creek (mouth)**

Region 9

LOE ID: 95670

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Marine Habitat
Aquatic Life Use: Wildlife Habitat

Number of Samples: 5
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Orange County Public Works
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:

Water Quality Objective/Criterion: Marine Communities shall not be degraded (2009 California Ocean Plan)
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline: California's Ocean Plan, Table B, 6-month median concentration, shall not exceed 2 ug/L.
Guideline Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Spatial Representation: Samples collected from SJC-1 at San Juan Creek mouth.
Temporal Representation: Samples collected from 12/2006-9/2008.

Environmental Conditions:
QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality

QAPP Information Reference(s):

DECISION ID	62921	Region 9
San Juan Creek (mouth)		

Pollutant: Diazinon
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 62921, Diazinon	Region 9
San Juan Creek (mouth)	

LOE ID: 95664
Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved
Beneficial Use: Marine Habitat
Aquatic Life Use: Wildlife Habitat
Number of Samples: 5
Number of Exceedances: 0
Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Zero of five samples exceed the maximum concentration for Diazinon criteria of 820.0 ng/L.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)
SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	One sample was collected at San Juan Creek mouth, at SJC1.
Temporal Representation:	Samples were collected from 12/2006-9/2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID 62923 Region 9	
San Juan Creek (mouth)	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Lead Do Not List on 303(d) list (TMDL required list) New Decision Original Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the five samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of five samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 62923, Lead Region 9	
San Juan Creek (mouth)	
LOE ID:	95663
Pollutant:	Lead

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the five samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from SJC-1 at the mouth of San Juan Creek.
Temporal Representation:	The sample was collected from SJC-1 from 12/2006 - 9/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	62924	Region 9
San Juan Creek (mouth)		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the five samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of five samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 62924, Malathion
San Juan Creek (mouth)**

Region 9

LOE ID: 95662

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Marine Habitat
Aquatic Life Use: Wildlife Habitat

Number of Samples: 5
Number of Exceedances: 1

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: One of five samples exceeded the maximum concentration for Malathion of 100 ng/L.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline: The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference: [Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C](#)

Spatial Representation: Five samples were collected at San Juan Creek (mouth) at SJC1.
Temporal Representation: Five samples were collected at SJC-1 in December 2006 - September 2008.
Environmental Conditions: According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.

QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

**DECISION ID 62942
San Juan Creek (mouth)**

Region 9

Pollutant: Silver
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five

samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 62942, Silver
San Juan Creek (mouth)**

Region 9

LOE ID:	95668
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the five samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 0.7 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1 at the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1 on 12/2006-9/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 62945
San Juan Creek (mouth)**

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 62945, Zinc San Juan Creek (mouth)

Region 9

LOE ID: 95669

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat

Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the five sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

SWAMP Data:	Non-SWAMP
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Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L to protect aquatic life in marine waters.
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Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
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Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from SJC-1 at the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1 on 12/2006-9/2008..
Environmental Conditions:	Samples were collected from stormwater runoff on 12/27/06 and 1/24/08, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	62917	Region 9
San Juan Creek (mouth)		

Pollutant:	Cadmium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Two of the five samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of five samples exceed the CRITERIA and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 62917, Cadmium	Region 9
San Juan Creek (mouth)	

LOE ID:	95666
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	5
Number of Exceedances:	2

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the five samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 1 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1 at the mouth of San Juan Creek.
Temporal Representation:	Five samples were collected from SJC-1 on 12/2006-9/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	62920	Region 9
San Juan Creek (mouth)		

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the five samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of five samples exceed the CRITERIA and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 62920, Copper		Region 9
San Juan Creek (mouth)		

LOE ID:	95671
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Orange County Public Works
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	
Water Quality Objective/Criterion:	Marine Communities shall not be degraded (2009 California Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	California's Ocean Plan, Table B, 6-month median concentration, shall not exceed 3 ug/L.
Guideline Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Spatial Representation:	Samples collected from SJC-1 at San Juan Creek mouth.
Temporal Representation:	Samples collected from 12/2006-9/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	62927	Region 9
San Juan Creek (mouth)		

Pollutant:	Nickel
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

[NUMBER] lines of evidence are available in the administrative record to assess this pollutant. Five of the five samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of five samples exceed the CRITERIA and this exceeds the allowable frequency listed in Table

3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 62927, Nickel

Region 9

San Juan Creek (mouth)

LOE ID:	95667
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Five of the five samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 5 ug/L total nickel to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1 at the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1 on 12/2006 - 9/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/27/06 and 1/24/08, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

62928

Region 9

San Juan Creek (mouth)

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Six of the six samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of six samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 62928, Nitrogen, ammonia (Total Ammonia)
San Juan Creek (mouth)

Region 9

LOE ID:	95661
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Six of six sample medians exceeded the water quality objective for total ammonia.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan, Objectives for inland waters, including coastal lagoons
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	0.025 mg/L NH3 as N
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at station SJC1.
Temporal Representation:	Samples were collected from December 2006 to September 2008.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

34549

Region 9

San Juan Creek (mouth)

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34549, Indicator Bacteria

Region 9

San Juan Creek (mouth)

LOE ID: 4727

Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples:	0
Number of Exceedances:	0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Santa Margarita Lagoon](#)
Water Body ID: CAE9021100019990209155924
Water Body Type: Estuary

DECISION ID	34567	Region 9
Santa Margarita Lagoon		

Pollutant: Eutrophic
Final Listing Decision: Do Not Delist from 303(d) list (being addressed with action other than TMDL)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Agriculture-storm runoff
Expected Attainment Date: 2027
Implementation Action Other than TMDL: Active stake holder process ongoing to address the pollutant.
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2014 or 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34567, Eutrophic Santa Margarita Lagoon

Region 9

LOE ID: 4730

Pollutant: Eutrophic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Estuarine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	47977	Region 9
Santa Margarita Lagoon		

Pollutant:	2-Methylnaphthalene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47977, 2-Methylnaphthalene	Region 9
Santa Margarita Lagoon	

LOE ID:	78327
Pollutant:	2-Methylnaphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47980	Region 9
Santa Margarita Lagoon		
Pollutant:	Antimony	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47980, Antimony
Santa Margarita Lagoon**

Region 9

LOE ID:	78329
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47990

Region 9

Santa Margarita Lagoon

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47990, Arsenic

Region 9

Santa Margarita Lagoon

LOE ID:	78330
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

DECISION ID	48004	Region 9
Santa Margarita Lagoon		

Pollutant: Benzo(a)anthracene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48004, Benzo(a)anthracene	Region 9
Santa Margarita Lagoon	

LOE ID: 78331

Pollutant: Benzo(a)anthracene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48011	Region 9
Santa Margarita Lagoon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48011, Cadmium	Region 9
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Santa Margarita Lagoon

LOE ID:	78334
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48012	Region 9
Santa Margarita Lagoon		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48012, Chlordane

Region 9

Santa Margarita Lagoon

LOE ID:	78335
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

48013

Region 9

Santa Margarita Lagoon

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48013, Chromium		Region 9
Santa Margarita Lagoon		
LOE ID:	78336	
Pollutant:	Chromium	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Estuarine Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.	
Data Reference:	Data for Various Pollutants from Bight, 2008.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	

Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48016	Region 9
Santa Margarita Lagoon		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48016, Chrysene (C1-C4)	Region 9
Santa Margarita Lagoon	

LOE ID:	78337
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48110	Region 9
Santa Margarita Lagoon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48110, Copper
Santa Margarita Lagoon**

Region 9

LOE ID:	78338
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID 48129
Santa Margarita Lagoon**

Region 9

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48129, Dibenz[a,h]anthracene

Region 9

Santa Margarita Lagoon

LOE ID:	78339
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dibenzo(a, h)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The Quality Assurance Project Plan from Southern California Bight was followed.
[Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	48130	Region 9
Santa Margarita Lagoon		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48130, Endrin	Region 9
Santa Margarita Lagoon	

LOE ID:	78340
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.

Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50566	Region 9
Santa Margarita Lagoon		
Pollutant:	Indicator Bacteria	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the contact recreation objective for Enterococcus, Zero out of one samples exceeded the contact and non contact recreation objective for Fecal Coliform, and Zero out of one samples exceeded the contact recreation objective for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the One samples exceed the contact recreation objective for Enterococcus, Zero out of one samples exceeded the contact and non contact recreation objective for Fecal Coliform, and Zero out of one samples exceeded the contact recreation objective for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 50566, Indicator Bacteria**Region 9****Santa Margarita Lagoon**

LOE ID:	76468
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (California Ocean Plan 2009).
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 50566, Indicator Bacteria**Region 9****Santa Margarita Lagoon**

LOE ID:	76484
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 50566, Indicator Bacteria	Region 9
Santa Margarita Lagoon	

LOE ID:	76460
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 50566, Indicator Bacteria	Region 9
Santa Margarita Lagoon	

LOE ID:	76483
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Enterococci.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 104 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48133	Region 9
Santa Margarita Lagoon		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48133, Lead
Santa Margarita Lagoon**

Region 9

LOE ID: 78305

Pollutant: Lead
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference: [Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278](#)

Spatial Representation: Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation: Data was collected on a single day 8/29/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

**DECISION ID 48137
Santa Margarita Lagoon**

Region 9

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48137, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Santa Margarita Lagoon

LOE ID:	78306
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

DECISION ID	48138	Region 9
Santa Margarita Lagoon		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48138, Mercury	Region 9
Santa Margarita Lagoon	

LOE ID:	78308
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48140	Region 9
Santa Margarita Lagoon		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the objective. Zero of the three samples exhibit sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48140, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
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Santa Margarita Lagoon

LOE ID:	78311
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Low molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 48140, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Santa Margarita Lagoon

LOE ID:	78312
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 48140, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Santa Margarita Lagoon

LOE ID:	78309
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

48143

Region 9

Santa Margarita Lagoon

Pollutant: PCBs (Polychlorinated biphenyls)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48143, PCBs (Polychlorinated biphenyls)

Region 9

Santa Margarita Lagoon

LOE ID: 78313

Pollutant: PCBs (Polychlorinated biphenyls)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 48144		Region 9
Santa Margarita Lagoon		
Pollutant:	Phenanthrene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 48144, Phenanthrene		Region 9
Santa Margarita Lagoon		
LOE ID:	78315	
Pollutant:	Phenanthrene	
LOE Subgroup:	Pollutant-Sediment	

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48147	Region 9
Santa Margarita Lagoon		

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with
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the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48147, Pyrene

Region 9

Santa Margarita Lagoon

LOE ID:	78316
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 48148

Region 9

Santa Margarita Lagoon

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48148, Silver
Santa Margarita Lagoon****Region 9**

LOE ID:	78319
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [

Temporal Representation:	902_6308]
Environmental Conditions:	Data was collected on a single day 8/29/2008.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The Quality Assurance Project Plan from Southern California Bight was followed. Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48149	Region 9
Santa Margarita Lagoon		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the eight samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48149, Toxicity	Region 9
Santa Margarita Lagoon	

LOE ID:	95680
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. None of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites. tr11a
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI. U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at stations 902SME_2003 a composite of 902_SME1L1_2003, 902_SME2L2_2003, and 902_SME2R1_2003. Station 902SME_2004 a composite of 902_SME1R1_2004, 902_SME2M1_2004, and 902_SME2R2_2004. Station 902SME_2005, a composite of 902_SME2M1_2005, 902_SME2R5_2005, 902_SME3R5_2005.
Temporal Representation:	The samples were collected in July 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge
QAPP Information Reference(s):	Quality Assurance Project Plan from Enviromatrix Analytical Rev. 18.

Line of Evidence (LOE) for Decision ID 48149, Toxicity
Santa Margarita Lagoon

Region 9

LOE ID:	95679
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Zero of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from sites 902_6303, 902_6311, 902_6314, 902_6317 Santa Margarita Estuary.

Temporal Representation: The samples were collected in August 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 48149, Toxicity

Region 9

Santa Margarita Lagoon

LOE ID: 76469

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Estuarine Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival of *Eohaustorius estuarius* and percent normal of *Mytilus galloprovincialis*.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation: The samples were collected from site 902_6308 Santa Margarita Estuary.

Temporal Representation: The samples were collected in August 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

DECISION ID 48150

Region 9

Santa Margarita Lagoon

Pollutant: Zinc

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48150, Zinc
Santa Margarita Lagoon**

Region 9

LOE ID: 78320

Pollutant: Zinc
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Santa Margarita Lagoon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).

Guideline Reference: [Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, \(1\): 81-97](#)

Spatial Representation: Data for this line of evidence for Santa Margarita Lagoon was collected at 1 monitoring site [902_6308]

Temporal Representation: Data was collected on a single day 8/29/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Loma Alta Slough](#)
Water Body ID: CAE9041000019991117150520
Water Body Type: Estuary

DECISION ID	34649	Region 9
Loma Alta Slough		

Pollutant: Eutrophic
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Urban Runoff/Storm Sewers
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.

Line of Evidence (LOE) for Decision ID 34649, Eutrophic Loma Alta Slough

Region 9

LOE ID: 4454

Pollutant: Eutrophic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	44598	Region 9
Loma Alta Slough		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. Seven of 186 samples exceed the Contact Recreation Single Sample maximum objective and One out of 34 sample exceeded the contact recreation geomean objective for Enterococcus. Seven out of 186 samples exceeded the Contact Recreation Single Sample Maximum Objective and Zero of the 34 samples exceeded the Contact Recreation Geomean Objective for Fecal Coliform. Fifteen out of 134 samples exceeded the Shellfish Harvesting Single Sample Maximum Objective for Total Coliform. Zero of the 186 samples exceeded the Contact Recreation Single Sample Maximum Objective and Zero of the 34 samples exceeded the Contact Recreation Geomean Objective for Total Coliform.

The coastal beach at this water segment is identified as an AB411 beach. To comply with the requirements of AB411 the dry weather data collected during the time frame of April 1st to October 31st is assessed using a four percent exceedance percentage, as described in section 3.3 and 4.3 of the Listing Policy. An assessment for dry weather single sample and the geometric mean calculation was conducted and two additional lines of evidence are available in the administrative record. One of 171 dry weather single samples and one of 25 geometric mean calculations exceeded the Contact Recreation Enterococcus Objective, Zero out of 25 samples exceeded the Contact Recreation dry weather geomean objective for fecal coliform, and Zero of the 25 samples exceeded the Contact Recreation dry weather geomean objective for Fecal Coliform and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 186 samples exceed the Contact Recreation Single Sample maximum objective and One out of 34 sample exceeded the contact recreation geomean objective for Enterococcus. Seven out of 186 samples exceeded the Contact Recreation Single Sample Maximum Objective and Zero of the 34 samples exceeded the Contact Recreation Geomean Objective for Fecal Coliform. Fifteen out of 134 samples exceeded the Shellfish Harvesting Single Sample Maximum Objective for Total Coliform. Zero of the 186 samples exceeded the Contact Recreation Single Sample Maximum Objective and Zero of

the 34 samples exceeded the Contact Recreation Geomean Objective for Total Coliform and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. One of 171 dry weather single samples and one of 25 geometric mean calculations exceeded the Contact Recreation Enterococcus Objective, Zero out of 25 samples exceeded the Contact Recreation dry weather geomean objective for fecal coliform, and Zero of the 25 samples exceeded the Contact Recreation dry weather geomean objective for Fecal Coliform and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy. and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy

6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria
Loma Alta Slough**

Region 9

LOE ID:	26879
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2006. A total of 15 single samples were collected with 12 samples correlated with a storm event. From the 12 samples only one exceeded single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected one to five times annually for a period of three years from October 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria**Region 9****Loma Alta Slough**

LOE ID:	30542
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 186 single samples were collected of which 171 are dry weather (AB411) samples and one sample exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria**Region 9****Loma Alta Slough**

LOE ID:	27110
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	186
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 186 single samples were collected with 7 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID:	27138
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	34
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 186 single samples were collected with 34 monthly geomeans calculated. Only one of the 34 geomeans exceed the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected 500 feet north of the Loma Alta Slough outlet.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID:	27142
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 186 single samples were collected with 34 monthly geomeans calculated. Only one of the 34 geomeans exceed the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID:	27122
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 186 single samples were collected with 15 samples correlated with a storm event. Five of the samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria
Loma Alta Slough

Region 9

LOE ID:	26902
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 134. Of the 134 samples, 15 exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected weekly from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID:	26903
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 186. None of the 34 samples exceeded the single sample geomean maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected almost monthly from January 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of San Diego's Quality beach monitoring program.
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID: 27137

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 186
Number of Exceedances: 7

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 186 single samples were collected with 7 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID: 27140

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 15
Number of Exceedances: 6

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from October 2004 through December 2007. A total of 186 single samples were collected with 15 samples correlated with a storm event. Six of the 15 single samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from October 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID:	27136
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from Januray 2004 through December 2007. A total of 186 single samples were collected with 34 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria	Region 9
Loma Alta Slough	

LOE ID:	31337
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria	Region 9
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Loma Alta Slough

LOE ID:	31339
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected weekly from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID:	31338
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through

	October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria

Region 9

Loma Alta Slough

LOE ID:	27061
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through December 2007. The number of samples collected for total coliform analysis was 186 with 15 samples correlated with a storm event. Only 3 of the 15 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.

Temporal Representation: Samples were collected weekly from June 2004 through December 2007.

Environmental Conditions: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria
Loma Alta Slough

Region 9

LOE ID: 4455

Pollutant: Indicator Bacteria

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified

Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified

Temporal Representation: Unspecified

Environmental Conditions: Unspecified

QAPP Information: Unspecified

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44598, Indicator Bacteria
Loma Alta Slough

Region 9

LOE ID: 27055

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 186

Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through December 2007. The number of samples collected for total coliform analysis was 186 with 34 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, 500 feet north of Loma Alta outlet in the Loma Alta HA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Buena Vista Lagoon](#)
Water Body ID: CAE9042100019990209090045
Water Body Type: Estuary

DECISION ID	48184	Region 9
Buena Vista Lagoon		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in sediment, and waters may be placed on the CWA section 303(d) List for toxicity alone.

One line of evidence is available in the administrative record to assess sediment toxicity. Three of the three samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the three samples exhibited sediment toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48184, Toxicity	Region 9
Buena Vista Lagoon	

LOE ID:	73079
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Three of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites. tr11a
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 904BVL_2003, 904BVL_2004, and 904BVL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	34484	Region 9
Buena Vista Lagoon		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2008
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34484, Indicator Bacteria	Region 9
Buena Vista Lagoon	

LOE ID: 4444

Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	34498	Region 9
Buena Vista Lagoon		

Pollutant:	Nutrients
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 34498, Nutrients	Region 9
Buena Vista Lagoon	

LOE ID:	4445
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	42423	Region 9
Buena Vista Lagoon		

Pollutant:	Sedimentation/Siltation
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 42423, Sedimentation/Siltation	Region 9
Buena Vista Lagoon	

LOE ID:	4446
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Agua Hedionda Lagoon](#)
Water Body ID: CAE9043100019990209154022
Water Body Type: Estuary

DECISION ID	34464	Region 9
Agua Hedionda Lagoon		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 4.2 of the Listing Policy. Under section 4.2 a single line(s) of evidence are necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. Three.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve lines of evidence have fully supporting use ratings with an amount of samples and exceedences that satisfy the the minimum samples for application of the binomial test in table 3.2, however 0 of 5 samples exceed the water quality objective for fecal coliform for the protection of the non-contact recreation beneficial use. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria	Region 9
Agua Hedionda Lagoon	

LOE ID: 72901
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 104 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria

Region 9

Agua Hedionda Lagoon

LOE ID:	72902
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria**Region 9****Agua Hedionda Lagoon**

LOE ID:	72903
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria**Region 9****Agua Hedionda Lagoon**

LOE ID:	72911
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters where shellfish harvesting for human consumption, commercial or sports purposes is designated the total coliform concentration shall not exceed 230 per 100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria

Region 9

Agua Hedionda Lagoon

LOE ID:	30332
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 2008 through October 2008. A total 27 geomeans were calculated with two exceeding the objective.
Data Reference:	Bacteria Monitoring Data for Agua Hedionda Lagoon. July 22, 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	SWRCB. 2005. Water Quality Control Plan, Ocean Waters of California (Ocean Plan). California Environmental Protection Agency, State Water Resources Control Board. February 14, 2006
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The area of concern is 6.8 acres from the outer lagoon. There were four monitoring stations in the outer lagoon and two stations in the inner lagoon. Station Transect 1, Transect 2, Trasect 3, and Inlet 1 are in the outer lagoon and Inlet 2 and Segment 1 in the inner portion.
Temporal Representation:	The bacteria monitoring occurred from January 2008 through October 2008
Environmental Conditions:	The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.
QAPP Information:	Water quality samples collected in accordance with the City of Encinitas quality assurance plan
QAPP Information Reference(s):	Carlsbad Hydrologic Unit, SDRWQCB Investigative Order R9-2006-076, Lagoon Monitoring, Quality Assurance Plan. September 1, 2007

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria

Region 9

Agua Hedionda Lagoon

LOE ID:	30331
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the from January 2008 through October 2008. A total 93 samples were collected with five exceeding the single sample objective.
Data Reference:	Bacteria Monitoring Data for Agua Hedionda Lagoon, July 22, 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml.
Objective/Criterion Reference:	SWRCB. 2005. Water Quality Control Plan, Ocean Waters of California (Ocean Plan). California Environmental Protection Agency, State Water Resources Control Board. February 14, 2006
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The area of concern is 6.8 acres from the outer lagoon. There were four monitoring stations in the outer lagoon and two stations in the inner lagoon. Station Transect 1, Transect 2, Trasect 3, and Inlet 1 are in the outer lagoon and Inlet 2 and Segment 1 in the inner portion.
Temporal Representation:	The bacteria monitoring occurred from January 2008 through October 2008
Environmental Conditions:	The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.
QAPP Information:	Water quality samples collected in accordance with the City of Encinitas quality assurance plan
QAPP Information Reference(s):	Carlsbad Hydrologic Unit, SDRWQCB Investigative Order R9-2006-076, Lagoon Monitoring, Quality Assurance Plan, September 1, 2007

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria

Region 9

Agua Hedionda Lagoon

LOE ID:	4438
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria

Region 9

Agua Hedionda Lagoon

LOE ID: 30327

Pollutant: Total Coliform
LOE Subgroup: Pollution
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 93
Number of Exceedances: 10

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected from January 2008 through October 2008. A total of 93 single samples were collected with 10 samples exceeded the single sample water quality objective.

Data Reference: [Bacteria Monitoring Data for Agua Hedionda Lagoon. July 22, 2009](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[SWRCB. 2005. Water Quality Control Plan. Ocean Waters of California \(Ocean Plan\). California Environmental Protection Agency. State Water Resources Control Board. February 14, 2006](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: The area of concern is 6.8 acres from the outer lagoon. There were four monitoring stations in the outer lagoon and two stations in the inner lagoon. Station Transect 1, Transect 2, Trasect 3, and Inlet 1 are in the outer lagoon and Inlet 2 and Segment 1 in the inner portion.

Temporal Representation: The bacteria monitoring occurred from January 2008 through October 2008

Environmental Conditions: The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.

QAPP Information: Water quality samples collected in accordance with the City of Encinitas quality assurance plan

QAPP Information Reference(s): [Carlsbad Hydrologic Unit, SDRWQCB Investigative Order R9-2006-076, Lagoon Monitoring, Quality Assurance Plan. September 1, 2007](#)

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria

Region 9

Agua Hedionda Lagoon

LOE ID: 30330

Pollutant: Total Coliform
LOE Subgroup: Pollution

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 2008 through October 2008. A total 27 geomeans were calculated with three exceeding the objective.
Data Reference:	Bacteria Monitoring Data for Agua Hedionda Lagoon. July 22, 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	SWRCB. 2005. Water Quality Control Plan, Ocean Waters of California (Ocean Plan). California Environmental Protection Agency, State Water Resources Control Board. February 14, 2006
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The area of concern is 6.8 acres from the outer lagoon. There were four monitoring stations in the outer lagoon and two stations in the inner lagoon. Station Transect 1, Transect 2, Trasect 3, and Inlet 1 are in the outer lagoon and Inlet 2 and Segment 1 in the inner portion.
Temporal Representation:	The bacteria monitoring occurred from January 2008 through October 2008
Environmental Conditions:	The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.
QAPP Information:	Water quality samples collected in accordance with the City of Encinitas quality assurance plan
QAPP Information Reference(s):	Carlsbad Hydrologic Unit, SDRWQCB Investigative Order R9-2006-076, Lagoon Monitoring, Quality Assurance Plan. September 1, 2007

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria
Agua Hedionda Lagoon

Region 9

LOE ID:	30333
Pollutant:	Enterococcus
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 2008 through October 2008. A total of 93 single samples were collected with nine samples exceeding the single sample objective.
Data Reference:	Bacteria Monitoring Data for Agua Hedionda Lagoon. July 22, 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml.
Objective/Criterion Reference:	SWRCB. 2005. Water Quality Control Plan, Ocean Waters of California (Ocean Plan). California Environmental Protection Agency, State Water Resources Control Board. February 14, 2006
Evaluation Guideline:	

Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The area of concern is 6.8 acres from the outer lagoon. There were four monitoring stations in the outer lagoon and two stations in the inner lagoon. Station Transect 1, Transect 2, Trasect 3, and Inlet 1 are in the outer lagoon and Inlet 2 and Segment 1 in the inner portion.
Temporal Representation:	The bacteria monitoring occurred from January 2008 through October 2008
Environmental Conditions:	The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.
QAPP Information:	Water quality samples collected in accordance with the City of Encinitas quality assurance plan
QAPP Information Reference(s):	Carlsbad Hydrologic Unit, SDRWQCB Investigative Order R9-2006-076, Lagoon Monitoring, Quality Assurance Plan, September 1, 2007

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria	Region 9
Agua Hedionda Lagoon	

LOE ID:	30329
Pollutant:	Total Coliform
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 2008 through October 2008. A total of 93 single samples were collected with no samples exceeded the single sample water quality objective.
Data Reference:	Bacteria Monitoring Data for Agua Hedionda Lagoon, July 22, 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin SWRCB. 2005. Water Quality Control Plan, Ocean Waters of California (Ocean Plan). California Environmental Protection Agency, State Water Resources Control Board, February 14, 2006

Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The area of concern is 6.8 acres from the outer lagoon. There were four monitoring stations in the outer lagoon and two stations in the inner lagoon. Station Transect 1, Transect 2, Trasect 3, and Inlet 1 are in the outer lagoon and Inlet 2 and Segment 1 in the inner portion.
Temporal Representation:	The bacteria monitoring occurred from January 2008 through October 2008
Environmental Conditions:	The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.
QAPP Information:	Water quality samples collected in accordance with the City of Encinitas quality assurance plan
QAPP Information Reference(s):	Carlsbad Hydrologic Unit, SDRWQCB Investigative Order R9-2006-076, Lagoon Monitoring, Quality Assurance Plan, September 1, 2007

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria	Region 9
Agua Hedionda Lagoon	

LOE ID:	30334
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Pollutant:	Enterococcus
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 2008 through October 2008. A total of 27 geomeans were calculated with three exceeding the objective.
Data Reference:	Bacteria Monitoring Data for Agua Hedionda Lagoon, July 22, 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	SWRCB. 2005. Water Quality Control Plan, Ocean Waters of California (Ocean Plan). California Environmental Protection Agency, State Water Resources Control Board. February 14, 2006
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The area of concern is 6.8 acres from the outer lagoon. There were four monitoring stations in the outer lagoon and two stations in the inner lagoon. Station Transect 1, Transect 2, Trasect 3, and Inlet 1 are in the outer lagoon and Inlet 2 and Segment 1 in the inner portion.
Temporal Representation:	The bacteria monitoring occurred from January 2008 through October 2008
Environmental Conditions:	The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.
QAPP Information:	Water quality samples collected in accordance with the City of Encinitas quality assurance plan
QAPP Information Reference(s):	Carlsbad Hydrologic Unit, SDRWQCB Investigative Order R9-2006-076, Lagoon Monitoring, Quality Assurance Plan, September 1, 2007

Line of Evidence (LOE) for Decision ID 34464, Indicator Bacteria
Agua Hedionda Lagoon

Region 9

LOE ID:	72912
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (California Ocean Plan 2009).
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon, Agua Hedionda Lagoon]

Temporal Representation: Data was collected on a single day 7/8/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	47483	Region 9
Agua Hedionda Lagoon		

Pollutant:	2-Methylnaphthalene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6, two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceeded the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47483, 2-Methylnaphthalene	Region 9
Agua Hedionda Lagoon	

LOE ID:	78195
Pollutant:	2-Methylnaphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47483, 2-Methylnaphthalene

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.

Temporal Representation: The samples were collected in July 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

DECISION ID	47484	Region 9
Agua Hedionda Lagoon		

Pollutant: Ammonia (Unionized)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of 86 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 86 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47484, Ammonia (Unionized)	Region 9
Agua Hedionda Lagoon	

LOE ID: 72884

Pollutant: Ammonia (Unionized)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 86

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	One of the samples exceeded 0.025 mg/l un-ionized ammonia (NH3) in coastal lagoon.
Data Reference:	Data for Various Pollutants in the Agua Hedionda Lagoon and Navy Storm Water, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Agua Hedionda Lagoon.
Temporal Representation:	Samples were collected from 11/2001 to 12/2008.
Environmental Conditions:	
QAPP Information:	No quality assurance information was provided.
QAPP Information Reference(s):	

DECISION ID	47485	Region 9
Agua Hedionda Lagoon		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6, two lines of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47485, Antimony	Region 9
Agua Hedionda Lagoon	

LOE ID:	78196
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Pollutant:	Antimony
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47485, Antimony

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47491	Region 9
Agua Hedionda Lagoon		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status, and a single line of evidence is necessary to assess listing status under section 3.5.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline in sediment and 1 of 1 sample exceeds the evaluation guideline in tissue.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceeded the evaluation guideline in sediment and 0 of 1 sample exceeds the evaluation guideline in tissue and these sample size are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47491, Arsenic	Region 9
Agua Hedionda Lagoon	

LOE ID:	72885
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Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47491, Arsenic
Agua Hedionda Lagoon

Region 9

LOE ID:	78197
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47491, Arsenic

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.

Temporal Representation: The samples were collected in July 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

DECISION ID	47492	Region 9
Agua Hedionda Lagoon		

Pollutant: Benzo(a)anthracene

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 two line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceeded the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47492, Benzo(a)anthracene	Region 9
Agua Hedionda Lagoon	

LOE ID: 78201

Pollutant: Benzo(a)anthracene

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 5

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47492, Benzo(a)anthracene

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47495	Region 9
Agua Hedionda Lagoon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline for sediment and 0 of 1 sample exceeds the evaluation guideline for tissue.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the evaluation guideline for sediment and 0 of 1 sample exceeds the evaluation guideline for tissue and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47495, Cadmium	Region 9
Agua Hedionda Lagoon	

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47495, Cadmium

Region 9

Agua Hedionda Lagoon

LOE ID:	72888
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)
[Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 1/20/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47495, Cadmium

Region 9

Agua Hedionda Lagoon

LOE ID: 78202

Pollutant: Cadmium

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 5

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).

Guideline Reference: [Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278](#)

Spatial Representation: Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]

Temporal Representation: Data was collected on a single day 7/8/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status, and a single line of evidence is necessary to assess listing status under section 3.5.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline in sediment and 1 of 1 sample exceeds the evaluation guideline in tissue.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceeded the evaluation guideline in sediment and 0 of 1 sample exceeds the evaluation guideline in tissue and these sample size are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47496, Chlordane	Region 9
Agua Hedionda Lagoon	

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47496, Chlordane Agua Hedionda Lagoon

Region 9

LOE ID:	78198
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Agua Hedionda Lagoon

LOE ID:	72886
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47506, Chlorpyrifos Agua Hedionda Lagoon

Region 9

LOE ID:	72887
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or

Objective/Criterion Reference:	aquatic organisms. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 47508 Region 9	
Agua Hedionda Lagoon	
Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47508, Chromium

Region 9

Agua Hedionda Lagoon

LOE ID:	78199
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47508, Chromium

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47509	Region 9
Agua Hedionda Lagoon		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 47509, Chrysene (C1-C4)**Region 9****Agua Hedionda Lagoon**

LOE ID:	78200
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47509, Chrysene (C1-C4)**Region 9****Agua Hedionda Lagoon**

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent

Data Reference:	normal of <i>Mytilus galloprovincialis</i> . Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47510	Region 9
Agua Hedionda Lagoon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47510, Copper**Region 9****Agua Hedionda Lagoon**

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47510, Copper**Region 9****Agua Hedionda Lagoon**

LOE ID:	78206
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.

Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47512	Region 9
Agua Hedionda Lagoon		

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47512, Dibenz[a,h]anthracene	Region 9
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Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47512, Dibenz[a,h]anthracene

Region 9

Agua Hedionda Lagoon

LOE ID:	78207
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Dibenz(a, h)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47513	Region 9
Agua Hedionda Lagoon		

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47513, Dieldrin	Region 9
Agua Hedionda Lagoon	

LOE ID:	72898
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Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	47514	Region 9
Agua Hedionda Lagoon		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 1 sample exceeds the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47514, Endosulfan**Region 9****Agua Hedionda Lagoon**

LOE ID:	72899
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R.

Guideline Reference:	<p>Brodberg, 2008; USEPA, 2000)</p> <p>Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment</p> <p>Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene</p> <p>Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis</p>
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	<p>Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program</p> <p>Additional background information can be found at:</p> <p>http://ccma.nos.noaa.gov/stressors/pollution/nsandt/</p>
QAPP Information Reference(s):	

DECISION ID 47515 Region 9	
Agua Hedionda Lagoon	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Endrin Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to determine listing status and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline in sediment, and 0 of 1 sample exceed the evaluation guideline in tissue.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the evaluation guideline in sediment, and 0 of 1 sample exceed the evaluation guideline in tissue and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 47515, Endrin**Region 9****Agua Hedionda Lagoon**

LOE ID:	72900
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47515, Endrin**Region 9**

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47515, Endrin

Region 9

Agua Hedionda Lagoon

LOE ID:	78208
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Endrin.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47516	Region 9
Agua Hedionda Lagoon		

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47516, Heptachlor epoxide	Region 9
Agua Hedionda Lagoon	

LOE ID:	72904
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Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	47521	Region 9
Agua Hedionda Lagoon		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 1 sample exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47521, Hexachlorobenzene/ HCB**Region 9****Agua Hedionda Lagoon**

LOE ID:	72905
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A.

Guideline Reference:	Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005) Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 47526 Region 9	
Agua Hedionda Lagoon	
Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47526, Lead**Region 9****Agua Hedionda Lagoon**

LOE ID:	78209
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47526, Lead**Region 9****Agua Hedionda Lagoon**

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47527	Region 9
Agua Hedionda Lagoon		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to determine listing status and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline in sediment, 1 of 5 samples exceed the water quality objective for toxicity in sediment, and 0 of 1 sample exceed the evaluation guideline in tissue.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the evaluation guideline in sediment, and 0 of 1 sample exceed the evaluation guideline in tissue and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47527, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**Region 9****Agua Hedionda Lagoon**

LOE ID:	72906
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47527, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**Region 9**

Agua Hedionda Lagoon

LOE ID:	78210
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47527, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47529	Region 9
Agua Hedionda Lagoon		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to determine listing status and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline in sediment, 1 of 5 samples exceed the water quality objective for toxicity in sediment, and 0 of 1 sample exceed the evaluation guideline in tissue.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the evaluation guideline in sediment, and 0 of 1 sample exceed the evaluation guideline in tissue and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47529, Mercury**Region 9****Agua Hedionda Lagoon**

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47529, Mercury**Region 9****Agua Hedionda Lagoon**

LOE ID:	78211
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial

Data Reference:	use support and results are as follows: 0 of 5 samples exceed the criterion for Mercury. Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47529, Mercury

Region 9

Agua Hedionda Lagoon

LOE ID:	72907
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 47533 Region 9	
Agua Hedionda Lagoon	
Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47533, Mirex Region 9	
Agua Hedionda Lagoon	
LOE ID:	72908
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The detected not quantifiable result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	47535	Region 9
Agua Hedionda Lagoon		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Under section 3.5, at

least one single line of evidence is necessary to determine listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline in sediment for low molecular PAHs, 0 of 5 samples exceed the evaluation guideline for high molecular weight PAHs, 0 of 5 samples exceed the evaluation guideline for Total PAHs, 0 of 1 sample exceeds the evaluation guideline for PAHs in tissue. One of 5 samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the evaluation guideline in sediment for low molecular PAHs, 0 of 5 samples exceed the evaluation guideline for high molecular weight PAHs, 0 of 5 samples exceed the evaluation guideline for Total PAHs, 0 of 1 sample exceeds the evaluation guideline for PAHs in tissue and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47535, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Agua Hedionda Lagoon

LOE ID: 77213

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)

LOE Subgroup: Pollutant-Tissue

Matrix: Tissue

Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: Shellfish surveys

Data Used to Assess Water Quality: The one sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.

Data Reference: [State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47535, PAHs (Polycyclic Aromatic Hydrocarbons)		Region 9
Agua Hedionda Lagoon		
LOE ID:	78203	
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Estuarine Habitat	
Number of Samples:	5	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, Low molecular weight.	
Data Reference:	Data for Various Pollutants from Bight, 2008.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).	
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278	

Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47535, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47535, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Agua Hedionda Lagoon

LOE ID:	78204
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47535, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Agua Hedionda Lagoon

LOE ID:	78212
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine

Spatial Representation: Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]

Temporal Representation: Data was collected on a single day 7/8/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	47559	Region 9
Agua Hedionda Lagoon		

Pollutant: PCBs (Polychlorinated biphenyls)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline in sediment and 0 of 1 sample exceeds the evaluation guideline in tissue. One of 5 samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the evaluation guideline in sediment and 0 of 1 sample exceeds the evaluation guideline in tissue and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47559, PCBs (Polychlorinated biphenyls)	Region 9
Agua Hedionda Lagoon	

LOE ID: 72909

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47559, PCBs (Polychlorinated biphenyls)
Agua Hedionda Lagoon

Region 9

LOE ID:	72896
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47559, PCBs (Polychlorinated biphenyls)

Region 9

Agua Hedionda Lagoon

LOE ID:	78205
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PCB, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

DECISION ID	47560	Region 9
Agua Hedionda Lagoon		

Pollutant:	Phenanthrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline. One of 5 samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47560, Phenanthrene	Region 9
Agua Hedionda Lagoon	

LOE ID:	78214
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for

Data Reference:	Phenanthrene. Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47560, Phenanthrene

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine

DECISION ID	47573	Region 9
Agua Hedionda Lagoon		

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline. One of 5 samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47573, Pyrene	Region 9
Agua Hedionda Lagoon	

LOE ID:	72909
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Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Estuarine Habitat
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Number of Samples:	5
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent

Data Reference:	normal of <i>Mytilus galloprovincialis</i> . Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47573, Pyrene Agua Hedionda Lagoon

Region 9

LOE ID:	78215
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

DECISION ID	47572	Region 9
Agua Hedionda Lagoon		

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47572, Selenium	Region 9
Agua Hedionda Lagoon	

LOE ID: 72910

Pollutant: Selenium
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	47575	Region 9
Agua Hedionda Lagoon		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the water quality objective. One of 5 samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47575, Silver

Region 9

Agua Hedionda Lagoon

LOE ID:	78216
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47575, Silver

Region 9

Agua Hedionda Lagoon

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47576	Region 9
Agua Hedionda Lagoon		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5, a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47576, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Agua Hedionda Lagoon

LOE ID:	72913
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHLG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline. One of 5 samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47579, Zinc	Region 9
Agua Hedionda Lagoon	

LOE ID:	78213
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Agua Hedionda Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Agua Hedionda Lagoon was collected at 5 monitoring sites [904_6269, 904_6270, 904_6271, 904_6280, 904_6282]
Temporal Representation:	Data was collected on a single day 7/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47579, Zinc
Agua Hedionda Lagoon

Region 9

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Region 9 Basin Plan.
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin
Guideline Reference:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID 47580

Region 9

Agua Hedionda Lagoon

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of 60 samples exceeds the basin plan objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 60 samples exceeds the basin plan objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47580, pH

Region 9

Agua Hedionda Lagoon

LOE ID: 72897

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Estuarine Habitat

Number of Samples: 60
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of the 60 samples exceeded the objective.
Data Reference: [Data for Various Pollutants in the Agua Hedionda Lagoon and Navy Storm Water, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the "intake" station.

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Samples were collected monthly from January 2004 to December 2008.
No quality assurance information was provided.

DECISION ID	47577	Region 9
Agua Hedionda Lagoon		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Waters may also be placed on the section 303(d) list for toxicity alone.

One line of evidence are available in the administrative record to assess this pollutant. Three of the eight samples exceed the objective. Three of eight samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the eight samples exceed the objective and this sample size is sufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47577, Toxicity	Region 9
Agua Hedionda Lagoon	

LOE ID:	72909
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6269, 904_6270, 904_6271, 904_6280, 904_6282 Agua Hedionda Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47577, Toxicity

Region 9

Agua Hedionda Lagoon

LOE ID:	72914
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. EPA-821-R-02-012

Spatial Representation:	The samples were collected at station 904AHL_2003 - composite from 904_AHL2M_2003, 904_AHL3L_2003, 904_AHL3M_2003. Station 904AHL_2004 - composite from 904_AHL2L2_2004, 904_AHL3L1_2004, 904_AHL3R1_2004, and Station 904AHL_2005 - composite from 904_AHL3L1_2005, 904_AHL3M1_2005, 904_AHL3R1_2005.
Temporal Representation:	The samples were collected in July 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	43540	Region 9
Agua Hedionda Lagoon		

Pollutant:	Sedimentation/Siltation
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy.</p> <p>Based on the readily available information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1.No data could be found to confirm sedimentation is causing impairment. <p>The delisting the Agua Hedionda Lagoon, for impairment by sedimentation/siltation, is warranted based upon the following observations:</p> <ol style="list-style-type: none"> 1) The lagoon is an engineered system that is artificially kept open and includes settling basins that are expected to require maintenance to remove sediment, 2) There is a significant lack of data to support the original sedimentation listing on the 1992 WQA, 3) The historical listings of the lagoon (1992 to 2006) apparently were limited to the outer lagoon, 4) The curtailed sandbar formation in the middle and inner lagoon since the 1998 dredging work in the outer, middle, and inner lagoon, 5) The outer lagoon continues to be dredged every 1 to 3 years, and 6) The apparent effective reduction in sediment build up in the inner lagoon settling basin.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43540, Sedimentation/Siltation	Region 9
Agua Hedionda Lagoon	

LOE ID:	30326
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Testimonial Evidence
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Estuarine Habitat
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Visual observation, may not quantify some parameters; single season; by prof.
Data Used to Assess Water Quality:	<p>Agua Hedionda Lagoon is a lagoon that has been extensively modified/improved to create a man-made lagoon to support the operation of the Encina Power Station. Under natural conditions, the lagoon was originally a "silt-choked" marsh that was only occasionally open to the ocean. The lagoon system configuration that was originally dredged in 1954 included two settling basins – one in the outer lagoon (~20 feet below MSL) to trap sands carried in through the ocean inlet, and one at the eastern end of the inner lagoon (~17 feet below MSL) to trap sediments from Agua Hedionda Creek, which discharges in to the lagoon. As of 2009, the lagoon system is essentially an engineered system that was built in 1954 and was expected to require some maintenance to remove sediment from the settling basins.</p> <p>The documentation to support the original basis for listing Agua Hedionda Lagoon as an impaired water quality segment, on the 1992 WQA, could not be found. The 1992 WQA listing of Agua Hedionda Lagoon is based primarily on the elevated levels of bacteria in shellfish muscle tissue rather than upon bacteria or sediment in the water column. This seems to be consistent with the 1992 WQA listing being limited to 1 of 400 acres, presumably associated with the shellfish growing area in the outer lagoon.</p> <p>The 1996 WQA increased the area affected to 5 acres, which still is limited to the shellfish growing area in the outer lagoon. In the 1998 303(d) List, the area affected is still shown as 5 acres. The 2002 and 2006 303(d) Lists show the area affected as 6.8 acres. In every listing, the area affected appears to be limited to the outer lagoon.</p> <p>In regards to the basis for listing Agua Hedionda Lagoon for sedimentation, data is not available to support the listing. The available information suggests that the original listing was likely based on the observation of sandbars that had formed in the outer, middle, and western part of the inner lagoon. The sandbars were first noticed in 1960, just 6 years after the initial dredging that formed the lagoon. The formation of the sandbars in the middle and inner lagoon appeared to be a result of the higher than expected flow rates required to operate the Encina Power Station, which greatly increased the sediment discharge into the lagoon from the ocean inlet during flood tides, and reduced the effectiveness of sediment removal out of the lagoon during the ebb tides.</p> <p>In 1998, the outer, middle, and inner Agua Hedionda Lagoon was dredged to conform to a remedial measure proposed by Jenkins and Wasyl (1996). Since the 1998 dredging, the formation of sandbars in the middle and inner lagoon do not appear to be re-occurring. The outer lagoon continues to be dredged approximately every 2 years. The overall impacts of the past dredging projects seems to have improved water circulation and reduced the sediment deposition in the settling basin in the eastern part of the inner lagoon as compared to the time period from 1954 to 1998. The Encina Power Station continues to monitor the sediment build up in the outer, middle, and inner lagoon.</p>
Data Reference:	Proposal to Remove/Delist Agua Hedionda Lagoon from the Clean Water Act Section 303(d) List of Water Quality Limited Segments for Sedimentation. Memorandum from Wayne Chiu to Alan Monji. July 28, 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Evidence of siltation.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin

Spatial Representation:	The area of concern is 6.8 acres from the outer lagoon.
Temporal Representation:	The narrative covers a period from 1992 to present
Environmental Conditions:	The outer lagoon is dredged approximately every two years to support the operation of the Encina Power Station.
QAPP Information:	None necessary
QAPP Information Reference(s):	

DECISION ID	34302	Region 9
Agua Hedionda Lagoon		

Pollutant:	Invasive Species
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.10 of the Listing Policy. Under section 3.10 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. *Caulerpa taxifolia* was first discovered at Agua Hedionda Lagoon on 6-12-00. Third year monitoring results, to summer 2003 detected no presence of *C. taxifolia*.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

- 1) Third year monitoring of *C. taxifolia* occurred from fall 2002 to summer 2003.
- 2) Baseline data was established from the first and second year monitoring results.
- 3) Third year monitoring for winter 2002 and spring 2003 were not conducted lagoon-wide, but focused on areas previously known to support *C. taxifolia*.
- 4) During the Fall 2002, Winter 2002, Spring 2003 and Summer 2003 surveys no *Caulerpa taxifolia* was found in the Agua Hedionda Lagoon. None has been discovered since 9/11/02, during the summer survey for the second year monitoring.
- 5) It cannot be determined if the trend in water quality is expected to meet water standards by the next listing cycle.
- 6) Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34302, Invasive Species	Region 9
Agua Hedionda Lagoon	

LOE ID:	641
Pollutant:	Invasive Species
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None

Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Caulerpa taxifolia was found in Aqua Hedionda Lagoon on 6-12-00. A second infestation was also located at Huntington Harbor, Orange County, CA. It is possible that Caulerpa taxifolia has been in the Lagoon for at least four years (as early as 1996) prior to its first discovery there. During the Fall 2002, Winter 2002, Spring 2003 and Summer 2003 surveys no Caulerpa taxifolia was found in the Aqua Hedionda Lagoon. (Anderson, 2005).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Third year monitoring of Caulerpa taxifolia at Aqua Hedionda Lagoon, Carlsbad, California. The amount of Caulerpa taxifolia in June 2000 was approximately 1,047 meters squared, but by the end of the second year of eradication the amount had been reduced to 0.4 meters squared. Surveys were conducted lagoon-wide, covering the west, central and east basin, however the spring 2003 and winter 2002 surveys were limited to high-risk areas previously known to support Caulerpa taxifolia.
Temporal Representation:	During the third year of eradication, survey work involved four surveys conducted quarterly from fall 2002 to the end of summer 2003. No Caulerpa taxifolia was located in the Lagoon during these surveys for the third year monitoring.
Environmental Conditions:	Changes in relative diversity and abundance of native species may also be driven by habitat alteration, flow changes, or hydromodification.
QAPP Information:	Peer Reviewed Journal Article.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Batiquitos Lagoon](#)
Water Body ID: CAE9045100019991117143917
Water Body Type: Estuary

DECISION ID	47817	Region 9
Batiquitos Lagoon		

Pollutant: 2-Methylnaphthalene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47817, 2-Methylnaphthalene	Region 9
Batiquitos Lagoon	

LOE ID: 78217
Pollutant: 2-Methylnaphthalene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47818	Region 9
Batiquitos Lagoon		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47818, Antimony
Batiquitos Lagoon**

Region 9

LOE ID:	78218
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47819

Region 9

Batiquitos Lagoon

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47819, Arsenic

Region 9

Batiquitos Lagoon

LOE ID:	78219
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

DECISION ID	47820	Region 9
Batiquitos Lagoon		

Pollutant: Benzo(a)anthracene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47820, Benzo(a)anthracene	Region 9
Batiquitos Lagoon	

LOE ID: 78220
Pollutant: Benzo(a)anthracene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Estuarine Habitat
Number of Samples: 5
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Benzo(a)anthracene.
Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47821	Region 9
Batiquitos Lagoon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47821, Cadmium	Region 9
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Batiquitos Lagoon

LOE ID:	78221
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47822	Region 9
Batiquitos Lagoon		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47822, Chlordane

Region 9

Batiquitos Lagoon

LOE ID:	78222
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

47823

Region 9

Batiquitos Lagoon

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47823, Chromium Batiquitos Lagoon

Region 9

LOE ID:	78223
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47824	Region 9
Batiquitos Lagoon		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47824, Chrysene (C1-C4)	Region 9
Batiquitos Lagoon	

LOE ID:	78224
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47825	Region 9
Batiquitos Lagoon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47825, Copper

Region 9

Batiquitos Lagoon

LOE ID:	78225
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

47826

Region 9

Batiquitos Lagoon

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with

sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47826, Dibenz[a,h]anthracene
Batiquitos Lagoon**

Region 9

LOE ID:	78226
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Dibenzo(a, h)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

DECISION ID	47827	Region 9
Batiquitos Lagoon		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47827, Endrin	Region 9
Batiquitos Lagoon	

LOE ID:	78227
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: a total of 5 samples were collected and they were all non-detect, however 3 samples were not used in analysis because when the method

Data Reference:	detection limit was organic carbon normalized, the results were above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47828		Region 9
Batiquitos Lagoon		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 47828, Lead
Batiquitos Lagoon**

Region 9

LOE ID:	78228
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

47829

Region 9

Batiquitos Lagoon

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47829, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Batiquitos Lagoon

LOE ID:	78229
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47830, Mercury	Region 9
Batiquitos Lagoon	

LOE ID:	78230
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Mercury.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47831	Region 9
Batiquitos Lagoon		
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria for total, high molecular weight, and low molecular weight PAHs. Two of 5 samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria for total, high molecular weight, and low molecular weight PAHs and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47831, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
Batiquitos Lagoon	

LOE ID:	78233
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47831, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Batiquitos Lagoon

LOE ID:	78231
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47831, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Batiquitos Lagoon

LOE ID:	78232
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, Low molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47893

Region 9

Batiquitos Lagoon

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47893, PCBs (Polychlorinated biphenyls)		Region 9
Batiquitos Lagoon		
LOE ID:	78234	
Pollutant:	PCBs (Polychlorinated biphenyls)	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Estuarine Habitat	
Number of Samples:	5	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PCB, Total.	
Data Reference:	Data for Various Pollutants from Bight, 2008.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	

Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47894	Region 9
Batiquitos Lagoon		

Pollutant:	Phenanthrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47894, Phenanthrene	Region 9
Batiquitos Lagoon	

LOE ID:	78235
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47895	Region 9
Batiquitos Lagoon		

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47895, Pyrene

Region 9

Batiquitos Lagoon

LOE ID:	78236
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

47897

Region 9

Batiquitos Lagoon

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47897, Silver

Region 9

Batiquitos Lagoon

LOE ID:	78237
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The Quality Assurance Project Plan from Southern California Bight was followed.
[Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	47898	Region 9
Batiquitos Lagoon		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47898, Zinc	Region 9
Batiquitos Lagoon	

LOE ID:	78238
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Batiquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.

Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Batiquitos Lagoon was collected at 5 monitoring sites [904_6250, 904_6251, 904_6252, 904_6253, 904_6264]
Temporal Representation:	Data was collected on a single day 7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47899	Region 9
Batiquitos Lagoon		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in sediment, and waters may be placed on the CWA section 303(d) List for toxicity alone.</p> <p>Two lines of evidence are available in the administrative record to assess sediment toxicity. Five of the eight samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the eight samples exhibited sediment toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47899, Toxicity	Region 9
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Batiquitos Lagoon

LOE ID:	73041
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6250, 904_6251, 904_6252, 904_6253, 904_6264 Batiquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47899, Toxicity

Region 9

Batiquitos Lagoon

LOE ID:	73040
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Three of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 904BL_2003, 904BL_2004, and 904BL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in July 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Elijo Lagoon](#)
Water Body ID: CAE9046100019990209161927
Water Body Type: Estuary

DECISION ID	34573	Region 9
San Elijo Lagoon		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2015
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant.

Enterococcus

0 of 5 samples exceed the single sample objective for water contact recreation.

Fecal coliform

0 of 5 samples exceed the single sample objective for water contact recreation.

0 of 5 samples exceed the single sample objective for non-contact recreation.

Total coliform

0 of 5 samples exceed the single sample objective for water contact recreation.

Indicator bacteria

This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Samples and exceedences are as follows:

Enterococcus

0 of 5 samples exceed the single sample objective for water contact recreation.

Fecal coliform

0 of 5 samples exceed the single sample objective for water contact recreation.

0 of 5 samples exceed the single sample objective for non-contact recreation.

Total coliform

0 of 5 samples exceed the single sample objective for water contact recreation.

Indicator bacteria

303(d) listing decisions made prior to 2006 were not held in an assessment database.

The decision to list the water body is based on a placeholder LOE of an assessment made prior to 2006. The Regional Boards will update this decision when an adequate amount of new data and information become available and are assessed.

4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 34573, Indicator Bacteria
San Elijo Lagoon**

Region 9

LOE ID:	4724
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 34573, Indicator Bacteria
San Elijo Lagoon**

Region 9

LOE ID:	75669
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 104 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34573, Indicator Bacteria

Region 9

San Elijo Lagoon

LOE ID:	75679
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (California Ocean Plan 2009).
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34573, Indicator Bacteria

Region 9

San Elijo Lagoon

LOE ID:	75671
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34573, Indicator Bacteria

Region 9

San Elijo Lagoon

LOE ID:	75670
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon, San Elijo Lagoon]

Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	48449	Region 9
San Elijo Lagoon		

Pollutant:	2-Methylnaphthalene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48449, 2-Methylnaphthalene		Region 9
San Elijo Lagoon		

LOE ID:	78298
Pollutant:	2-Methylnaphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use

	support and results are as follows: 0 of 5 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53351	Region 9
San Elijo Lagoon		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53351, Antimony
San Elijo Lagoon**

Region 9

LOE ID:	78299
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID
San Elijo Lagoon**

53353

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53353, Arsenic
San Elijo Lagoon**

Region 9

LOE ID:	78300
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID 53354
San Elijo Lagoon**

Region 9

Pollutant:	Benzo(a)anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53354, Benzo(a)anthracene		Region 9
San Elijo Lagoon		
LOE ID:	78301	
Pollutant:	Benzo(a)anthracene	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Estuarine Habitat	
Number of Samples:	5	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Benzo(a)anthracene.	
Data Reference:	Data for Various Pollutants from Bight, 2008.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 53355 Region 9	
San Elijo Lagoon	
Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53355, Cadmium Region 9	
San Elijo Lagoon	
LOE ID:	78302
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53356	Region 9
San Elijo Lagoon		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum

of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53356, Chlordane

Region 9

San Elijo Lagoon

LOE ID:	78303
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

53357

Region 9

San Elijo Lagoon

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53357, Chromium**Region 9****San Elijo Lagoon**

LOE ID:	78304
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites

Temporal Representation:	[904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Environmental Conditions:	Data was collected over the time period 7/15/2008-7/22/2008.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The Quality Assurance Project Plan from Southern California Bight was followed. Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53358	Region 9
San Elijo Lagoon		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53358, Chrysene (C1-C4)		Region 9
San Elijo Lagoon		

LOE ID:	78283
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 53350		Region 9
San Elijo Lagoon		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 53350, Copper
San Elijo Lagoon**

Region 9

LOE ID:	78284
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

53359

Region 9

San Elijo Lagoon

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53359, Dibenz[a,h]anthracene
San Elijo Lagoon**

Region 9

LOE ID:	78285
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Dibenzo(a, h)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

53360

Region 9

Pollutant: Endrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53360, Endrin **Region 9**
San Elijo Lagoon

LOE ID: 78286

Pollutant: Endrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: a total of 5 samples were collected and they were all non-detect, however 1 sample was not used in analysis because when the method detection limit was organic carbon normalized, the result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53361	Region 9
San Elijo Lagoon		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53361, Lead	Region 9
San Elijo Lagoon	

LOE ID:	78290
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Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53362	Region 9
San Elijo Lagoon		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53362, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Elijo Lagoon

LOE ID:	78291
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

53363

Region 9

San Elijo Lagoon

Pollutant:

Mercury

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53363, Mercury
San Elijo Lagoon**

Region 9

LOE ID: 78293

Pollutant: Mercury
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Mercury.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental

Services, 1991).
Guideline Reference: [Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency](#)

Spatial Representation: Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]

Temporal Representation: Data was collected over the time period 7/15/2008-7/22/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	53364	Region 9
San Elijo Lagoon		

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples for each PAH type (high/low/total) exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53364, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
San Elijo Lagoon	

LOE ID: 78294

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 53364, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

San Elijo Lagoon

LOE ID:	78296
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as

Spatial Representation: Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]

Temporal Representation: Data was collected over the time period 7/15/2008-7/22/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

Line of Evidence (LOE) for Decision ID 53364, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
San Elijo Lagoon	

LOE ID: 78295

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 5

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, Low molecular weight.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).

Guideline Reference: [Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278](#)

Spatial Representation: Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]

Temporal Representation: Data was collected over the time period 7/15/2008-7/22/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	53366	Region 9
San Elijo Lagoon		

Pollutant: PCBs (Polychlorinated biphenyls)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53366, PCBs (Polychlorinated biphenyls)**Region 9****San Elijo Lagoon**

LOE ID:	78297
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PCB, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53367	Region 9
San Elijo Lagoon		

Pollutant:	Phenanthrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53367, Phenanthrene	Region 9
San Elijo Lagoon	

LOE ID:	78287
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53368	Region 9
San Elijo Lagoon		

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53368, Pyrene
San Elijo Lagoon**

Region 9

LOE ID:	78288
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53369	Region 9
San Elijo Lagoon		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53369, Silver
San Elijo Lagoon**

Region 9

LOE ID:	78289
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID 53370
San Elijo Lagoon**

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53370, Zinc		Region 9
San Elijo Lagoon		
LOE ID:	78292	
Pollutant:	Zinc	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Estuarine Habitat	
Number of Samples:	5	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Elijo Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.	
Data Reference:	Data for Various Pollutants from Bight, 2008.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	

Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for San Elijo Lagoon was collected at 5 monitoring sites [904_6239, 904_6242, 904_6243, 904_6244, 904_6245]
Temporal Representation:	Data was collected over the time period 7/15/2008-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	53371	Region 9
San Elijo Lagoon		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in sediment, and waters may be placed on the CWA section 303(d) List for toxicity alone.</p> <p>Two lines of evidence are available in the administrative record to assess sediment toxicity. Six of the eight samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the eight samples exhibited sediment toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53371, Toxicity	Region 9
San Elijo Lagoon	

LOE ID:	75680
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Three of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 9904SEL_2003, 904SEL_2004, and 904SEL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 53371, Toxicity San Elijo Lagoon

Region 9

LOE ID:	75681
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Three of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 904_6239, 904_6242, 904_6243, 904_6244, 904_6245 San Elijo Lagoon.
Temporal Representation:	The samples were collected in August 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	34554	Region 9
San Elijo Lagoon		

Pollutant:	Eutrophic
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.

Line of Evidence (LOE) for Decision ID 34554, Eutrophic	Region 9
San Elijo Lagoon	

LOE ID:	4723
Pollutant:	Eutrophic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	34744	Region 9
San Elijo Lagoon		

Pollutant:	Sedimentation/Siltation
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34744, Sedimentation/Siltation	Region 9
San Elijo Lagoon	

LOE ID:	4725
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Los Penasquitos Lagoon](#)
Water Body ID: CAE9061000019990209152610
Water Body Type: Estuary

DECISION ID	52865	Region 9
Los Penasquitos Lagoon		

Pollutant: **2-Methylnaphthalene**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52865, 2-Methylnaphthalene	Region 9
Los Penasquitos Lagoon	

LOE ID: 78239
Pollutant: 2-Methylnaphthalene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52865, 2-Methylnaphthalene

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the

control.

Guideline Reference:

Spatial Representation: The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.

Temporal Representation: The samples were collected in July 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 52865, 2-Methylnaphthalene
Los Penasquitos Lagoon

Region 9

LOE ID: 74213

Pollutant: Toxicity
 LOE Subgroup: Toxicity
 Matrix: Sediment
 Fraction: None

Beneficial Use: Estuarine Habitat

Number of Samples: 3
 Number of Exceedances: 2

Data and Information Type: TOXICITY TESTING
 Data Used to Assess Water Quality: Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.

Data Reference: [Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.

Temporal Representation: The samples were collected in 2003, 2004, and 2005.

Environmental Conditions:

QAPP Information: The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

DECISION ID 52866
Los Penasquitos Lagoon

Region 9

Pollutant: Antimony
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

**Line of Evidence (LOE) for Decision ID 52866, Antimony
Los Penasquitos Lagoon**

Region 9

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:

The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.

Temporal Representation:

The samples were collected in July 2008.

Environmental Conditions:

QAPP Information:

This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 52866, Antimony

Region 9

Los Penasquitos Lagoon

LOE ID: 78240

Pollutant: Antimony

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 5

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Antimony.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).

Guideline Reference: [Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278](#)

Spatial Representation: Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]

Temporal Representation: Data was collected on a single day 7/17/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

Line of Evidence (LOE) for Decision ID 52866, Antimony

Region 9

Los Penasquitos Lagoon

LOE ID: 74213

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	52867	Region 9
Los Penasquitos Lagoon		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

**Line of Evidence (LOE) for Decision ID 52867, Arsenic
Los Penasquitos Lagoon**

Region 9

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 52867, Arsenic
Los Penasquitos Lagoon**

Region 9

LOE ID:	78241
Pollutant:	Arsenic

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52867, Arsenic

Region 9

Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there

is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:

The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.

Temporal Representation:

The samples were collected in 2003, 2004, and 2005.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

DECISION ID	52868	Region 9
Los Penasquitos Lagoon		

Pollutant: Benzo(a)anthracene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52868, Benzo(a)anthracene	Region 9
Los Penasquitos Lagoon	

LOE ID: 78242
Pollutant: Benzo(a)anthracene
LOE Subgroup: Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52868, Benzo(a)anthracene
Los Penasquitos Lagoon

Region 9

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:

The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.

Temporal Representation:

The samples were collected in 2003, 2004, and 2005.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 52868, Benzo(a)anthracene

Region 9

Los Penasquitos Lagoon

LOE ID: 74214

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Estuarine Habitat

Number of Samples: 5

Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of *Eohaustorius estuarius* and percent normal of *Mytilus galloprovincialis*.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.

Temporal Representation: The samples were collected in July 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

DECISION ID 52869

Region 9

Los Penasquitos Lagoon

Pollutant:	Cadmium (sediment)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52869, Cadmium (sediment)

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52869, Cadmium (sediment)

Region 9

Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52869, Cadmium (sediment)

Region 9

Los Penasquitos Lagoon

LOE ID:	78243
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52870	Region 9
Los Penasquitos Lagoon		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52870, Chlordane

Region 9

Los Penasquitos Lagoon

LOE ID:	78244
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52870, Chlordane

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52870, Chlordane
Los Penasquitos Lagoon

Region 9

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	52871	Region 9
Los Penasquitos Lagoon		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.
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Line of Evidence (LOE) for Decision ID 52871, Chromium	Region 9
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Los Penasquitos Lagoon

LOE ID:	78245
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52871, Chromium

Region 9

Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52871, Chromium
Los Penasquitos Lagoon

Region 9

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52872, Chrysene (C1-C4)	Region 9
Los Penasquitos Lagoon	

LOE ID:	78246
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52872, Chrysene (C1-C4)

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52872, Chrysene (C1-C4)

Region 9

Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composite from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID 52873

Region 9

Los Penasquitos Lagoon

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

**Line of Evidence (LOE) for Decision ID 52873, Copper
Los Penasquitos Lagoon**

Region 9

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 52873, Copper
Los Penasquitos Lagoon**

Region 9

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 52873, Copper
Los Penasquitos Lagoon**

Region 9

LOE ID:	78247
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.

Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52874	Region 9
Los Penasquitos Lagoon		

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52874, Dibenz[a,h]anthracene	Region 9
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Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52874, Dibenz[a,h]anthracene

Region 9

Los Penasquitos Lagoon

LOE ID:	78248
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Dibenz(a, h)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52874, Dibenz[a,h]anthracene

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

LOE ID:	78249
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: a total of 5 samples were collected and they were all non-detect, however 2 samples were not used in analysis because when the method detection limit was organic carbon normalized, the results were above the guideline and

Data Reference:	therefore could not be quantified with the level of certainty required by the Listing Policy. Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52875, Endrin

Region 9

Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 52875, Endrin

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID

53454

Region 9

Los Penasquitos Lagoon

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2, one line of evidence are necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. With data collected in 2008, zero of five single samples exceed the water quality objective for enterococcus for the protection of REC-1, one of five single samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With data collected in 2008, zero of five single samples exceed the water quality objective for enterococcus for the protection of REC-1, one of five single samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53454, Indicator Bacteria

Region 9

Los Penasquitos Lagoon

LOE ID:	74184
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

Line of Evidence (LOE) for Decision ID 53454, Indicator Bacteria**Region 9****Los Penasquitos Lagoon**

LOE ID:	74183
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 53454, Indicator Bacteria**Region 9****Los Penasquitos Lagoon**

LOE ID:	74182
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 104 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 53454, Indicator Bacteria

Region 9

Los Penasquitos Lagoon

LOE ID:	74212
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (California Ocean Plan 2009).
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 53454, Indicator Bacteria

Region 9

Los Penasquitos Lagoon

LOE ID:	74201
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters where shellfish harvesting for human consumption, commercial or sports purposes is designated the total coliform concentration shall not exceed 230 per 100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon, Los Penasquitos Lagoon]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52876	Region 9
Los Penasquitos Lagoon		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is
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insufficient to determine use support.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52876, Lead

Region 9

Los Penasquitos Lagoon

LOE ID:	78250
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52876, Lead

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52876, Lead Los Penasquitos Lagoon

Region 9

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:

The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.

Temporal Representation:

The samples were collected in 2003, 2004, and 2005.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

DECISION ID	52877	Region 9
Los Penasquitos Lagoon		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status

Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52877, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Los Penasquitos Lagoon	

LOE ID: 74213

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52877, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Los Penasquitos Lagoon

LOE ID:	78251
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Faurey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52877, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID

52878

Region 9

Los Penasquitos Lagoon

Pollutant: Mercury
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52878, Mercury Los Penasquitos Lagoon

Region 9

LOE ID: 74213

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Estuarine Habitat

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of *Eohaustorius estuarius*. Each sample is a sediment composites from three different sites.

Data Reference: [Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52878, Mercury
Los Penasquitos Lagoon

Region 9

LOE ID:	78252
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Mercury.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52878, Mercury
Los Penasquitos Lagoon

Region 9

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	52879	Region 9
Los Penasquitos Lagoon		
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons) Toxicity	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>	

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective for each type of PAHs. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

**Line of Evidence (LOE) for Decision ID 52879, Multiple Pollutants
Los Penasquitos Lagoon**

Region 9

LOE ID:	78255
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 52879, Multiple Pollutants
Los Penasquitos Lagoon**

Region 9

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52879, Multiple Pollutants
Los Penasquitos Lagoon

Region 9

LOE ID:	78253
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52879, Multiple Pollutants

Region 9

Los Penasquitos Lagoon

LOE ID:	78254
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, Low molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52879, Multiple Pollutants

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	52880	Region 9
Los Penasquitos Lagoon		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

Line of Evidence (LOE) for Decision ID 52880, PCBs (Polychlorinated biphenyls)

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52880, PCBs (Polychlorinated biphenyls)

Region 9

Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52880, PCBs (Polychlorinated biphenyls)

Region 9

Los Penasquitos Lagoon

LOE ID:	78256
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PCB, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52881	Region 9
Los Penasquitos Lagoon		

Pollutant:	Phenanthrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.
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Line of Evidence (LOE) for Decision ID 52881, Phenanthrene	Region 9
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Los Penasquitos Lagoon

LOE ID:	78257
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52881, Phenanthrene

Region 9

Los Penasquitos Lagoon

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52881, Phenanthrene
Los Penasquitos Lagoon

Region 9

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.</p>

Line of Evidence (LOE) for Decision ID 52882, Pyrene	Region 9
Los Penasquitos Lagoon	

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52882, Pyrene

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine

QAPP Information Reference(s): [Monitoring Survey Quality Assurance Plan.](#)
[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 52882, Pyrene
Los Penasquitos Lagoon

Region 9

LOE ID: 78258

Pollutant: Pyrene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Pyrene.
Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference: [Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278](#)

Spatial Representation: Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation: Data was collected on a single day 7/17/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID 52883
Los Penasquitos Lagoon

Region 9

Pollutant: Silver
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight

samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.

**Line of Evidence (LOE) for Decision ID 52883, Silver
Los Penasquitos Lagoon**

Region 9

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge

Line of Evidence (LOE) for Decision ID 52883, Silver

Region 9

Los Penasquitos Lagoon

LOE ID:	78259
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52883, Silver

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.

Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	52884	Region 9
Los Penasquitos Lagoon		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of eight samples (sediment toxicity) and zero of five samples (sediment) exceeded the water quality objective. The level of toxicity in sediments indicates that the beneficial use is not fully supported. The applicable sediment quality standard for this pollutant is not being exceeded and is insufficient to determine use support. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, this water body-pollutant combination should not be placed on the section 303(d) list because applicable the water or sediment quality standards for these pollutants are not being exceeded or are insufficient to determine use support.	

Line of Evidence (LOE) for Decision ID 52884, Zinc
Los Penasquitos Lagoon

Region 9

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52884, Zinc
Los Penasquitos Lagoon

Region 9

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius.

Data Reference:	Each sample is a sediment composites from three different sites. Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52884, Zinc

Region 9

Los Penasquitos Lagoon

LOE ID:	78260
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Los Penasquitos Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Los Penasquitos Lagoon was collected at 5 monitoring sites [906_6228, 906_6229, 906_6230, 906_6232, 906_6236]
Temporal Representation:	Data was collected on a single day 7/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

DECISION ID	52885	Region 9
Los Penasquitos Lagoon		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in sediment, and waters may be placed on the CWA section 303(d) List for toxicity alone.

Two lines of evidence are available in the administrative record to assess sediment toxicity. Three of the eight samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the eight samples exhibited sediment toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52885, Toxicity	Region 9
Los Penasquitos Lagoon	

LOE ID:	74213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 906LPL_2003, 906LPL_2004, and 906LPL_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52885, Toxicity

Region 9

Los Penasquitos Lagoon

LOE ID:	74214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. One of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 906_6228, 906_6229, 906_6230, 906_6232, 906_6236 Los Penasquitos Lagoon.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine

DECISION ID	36260	Region 9
Los Penasquitos Lagoon		

Pollutant:	Sedimentation/Siltation
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Channel Erosion Channelization Erosion/Siltation Flow Alteration/Regulation/Modification Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Streambank Modification/Destabilization Urban Runoff/Storm Sewers
TMDL Name:	Los Penasquitos Lagoon Sedimentation
TMDL Project Code:	695
Date TMDL Approved by USEPA:	10/30/2014
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Decision Recommendation:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.

Line of Evidence (LOE) for Decision ID 36260, Sedimentation/Siltation	Region 9
Los Penasquitos Lagoon	

LOE ID:	4456
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Famosa Slough and Channel](#)
Water Body ID: CAE9071100019990209122340
Water Body Type: Estuary

DECISION ID	34004	Region 9
Famosa Slough and Channel		

Pollutant: Eutrophic
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Urban Runoff/Storm Sewers
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34004, Eutrophic	Region 9
Famosa Slough and Channel	

LOE ID: 4451

Pollutant: Eutrophic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Tijuana River Estuary](#)
Water Body ID: CAE9111100019990208143032
Water Body Type: Estuary

DECISION ID	34382	Region 9
Tijuana River Estuary		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2010
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Whereas the latest data from five stations on July 16, 2008 (from Bight 08 program) show 0 of 5 samples exceed the water quality objectives for their respective single sample maximum thresholds for enterococcus, fecal coliform, and total coliform, place-holder LOE from pre-2006 data conclude that REC-1 is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. place-holder LOE from pre-2006 data conclude that REC-1 is not supported and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34382, Indicator Bacteria	Region 9
Tijuana River Estuary	

LOE ID: 76803
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters where shellfish harvesting for human consumption, commercial or sports purposes is designated the total coliform concentration shall not exceed 230 per 100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34382, Indicator Bacteria

Region 9

Tijuana River Estuary

LOE ID:	76804
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (California Ocean Plan 2009).
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary]

Temporal Representation: Data was collected on a single day 7/16/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

Line of Evidence (LOE) for Decision ID 34382, Indicator Bacteria

Region 9

Tijuana River Estuary

LOE ID: 76842

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Enterococci.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Samples shall not exceed 104 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary]

Temporal Representation: Data was collected on a single day 7/16/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

Line of Evidence (LOE) for Decision ID 34382, Indicator Bacteria

Region 9

Tijuana River Estuary

LOE ID: 76843

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the

Data Reference:	<p>criterion for Coliform, Fecal.</p> <p>Data for Various Pollutants from Bight, 2008.</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 34382, Indicator Bacteria

Region 9

Tijuana River Estuary

LOE ID:	4670
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34382, Indicator Bacteria

Region 9

Tijuana River Estuary

LOE ID:	76844
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary, Tijuana River Estuary]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	41510	Region 9
Tijuana River Estuary		

Pollutant:	Lead
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One line of evidence is the 303(d) listing decision made prior to 2006, which was to place this water segment-pollutant combination on the CWA section 303(d) List. A second line of evidence is more recent data, and zero of five sediment samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five sediment samples exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A

minimum of 28 samples is needed to determine if a beneficial use is fully supported using table 4.1. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41510, Lead

Region 9

Tijuana River Estuary

LOE ID:	78368
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 41510, Lead

Region 9

Tijuana River Estuary

LOE ID:	4671
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	52218	Region 9
Tijuana River Estuary		

Pollutant:	2-Methylnaphthalene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52218, 2-Methylnaphthalene	Region 9
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Tijuana River Estuary

LOE ID:	78357
Pollutant:	2-Methylnaphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

52226

Region 9

Tijuana River Estuary

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d)</p>

List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52226, Antimony
Tijuana River Estuary**

Region 9

LOE ID:	78358
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 52237
Tijuana River Estuary

Region 9

Pollutant:	Benzo(a)anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52237, Benzo(a)anthracene Tijuana River Estuary

Region 9

LOE ID:	78360
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 52241		Region 9
Tijuana River Estuary		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (shellfish tissue) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (tissue) and zero of five samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 52241, Cadmium		Region 9
Tijuana River Estuary		

LOE ID:	78361
Pollutant:	Cadmium

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52241, Cadmium

Region 9

Tijuana River Estuary

LOE ID:	76816
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52243	Region 9
Tijuana River Estuary		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (shellfish tissue) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (tissue) and zero of five samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52243, Chlordane
Tijuana River Estuary**

Region 9

LOE ID:	78362
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 52243, Chlordane
Tijuana River Estuary**

Region 9

LOE ID:	76820
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52244	Region 9
Tijuana River Estuary		
Pollutant:	Chlorpyrifos	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.</p>	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52244, Chlorpyrifos
Tijuana River Estuary**

Region 9

LOE ID:	76821
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 12/10/2007

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	52263	Region 9
Tijuana River Estuary		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52263, Chromium	Region 9
Tijuana River Estuary	

LOE ID:	78363
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52267	Region 9
Tijuana River Estuary		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52267, Chrysene (C1-C4)

Region 9

Tijuana River Estuary

LOE ID:	78364
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

52274

Region 9

Tijuana River Estuary

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52274, Copper
Tijuana River Estuary**

Region 9

LOE ID:	78365
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

DECISION ID	52276	Region 9
Tijuana River Estuary		

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the five samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52276, Dibenz[a,h]anthracene	Region 9
Tijuana River Estuary	

LOE ID:	78366
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Dibenzo(a, h)anthracene.

Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52277	Region 9
Tijuana River Estuary		

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52277, Dieldrin	Region 9
Tijuana River Estuary	

LOE ID:	76833
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52280	Region 9
Tijuana River Estuary		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52280, Endosulfan

Region 9

Tijuana River Estuary

LOE ID: 76837

Pollutant: Endosulfan
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline: The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is

Guideline Reference:	20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000) Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 52286 Region 9	
Tijuana River Estuary	
Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Tijuana River Estuary

LOE ID:	76845
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52291, Hexachlorobenzene/ HCB Tijuana River Estuary

Region 9

LOE ID:	76846
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52296	Region 9
Tijuana River Estuary		
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (shellfish tissue) and zero of five samples (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (tissue) and zero of five samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available 	

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52296, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Tijuana River Estuary

LOE ID:	78369
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Faurey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52296, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Tijuana River Estuary

LOE ID:	76850
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish

Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52298	Region 9
Tijuana River Estuary		
Pollutant:	Mercury	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status	

for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (shellfish tissue) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (tissue) and zero of five samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52298, Mercury

Region 9

Tijuana River Estuary

LOE ID:	78370
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Mercury.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]

Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52298, Mercury

Region 9

Tijuana River Estuary

LOE ID:	76853
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 52301

Region 9

Tijuana River Estuary

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52301, Mirex Tijuana River Estuary

Region 9

LOE ID:	76785
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 52305		Region 9
Tijuana River Estuary		
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (shellfish tissue) and zero of five samples (sediment) exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (tissue) and zero of five samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52305, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Tijuana River Estuary

LOE ID:	76786
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends

(NS&T). Mussels are shipped to NOAA's contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAA's NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 52305, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Tijuana River Estuary

LOE ID:	78351
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52305, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Tijuana River Estuary

LOE ID:	78349
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52305, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Tijuana River Estuary

LOE ID:	78350
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, Low molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [

Temporal Representation:	911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Environmental Conditions:	Data was collected on a single day 7/16/2008.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The Quality Assurance Project Plan from Southern California Bight was followed. Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52813	Region 9
Tijuana River Estuary		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. One of one sample (shellfish tissue) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample (tissue) and zero of five samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52813, PCBs (Polychlorinated biphenyls)	Region 9
Tijuana River Estuary	

LOE ID:	78352
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PCB, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52813, PCBs (Polychlorinated biphenyls)

Region 9

Tijuana River Estuary

LOE ID:	76795
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)

Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52814	Region 9
Tijuana River Estuary		

Pollutant:	Phenanthrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 52814, Phenanthrene	Region 9
Tijuana River Estuary	

LOE ID: 78353

Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52815	Region 9
Tijuana River Estuary		
Pollutant:	Pyrene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 	

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52815, Pyrene
Tijuana River Estuary**

Region 9

LOE ID:	78354
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID 52816
Tijuana River Estuary**

Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52816, Selenium

Region 9

Tijuana River Estuary

LOE ID: 76799

Pollutant: Selenium
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline: The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)

Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	52817	Region 9
Tijuana River Estuary		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52817, Silver	Region 9
Tijuana River Estuary	

LOE ID:	78355
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52818	Region 9
Tijuana River Estuary		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52818, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Tijuana River Estuary

LOE ID:	76805
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	

QAPP Information:

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	52820	Region 9
Tijuana River Estuary		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52820, Zinc	Region 9
Tijuana River Estuary	

LOE ID:	78356
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	52819	Region 9
Tijuana River Estuary		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in sediment, and waters may be placed on the CWA section 303(d) List for toxicity alone.</p> <p>Two lines of evidence are available in the administrative record to assess sediment toxicity. Four of the eight samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the eight samples exhibited sediment toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52819, Toxicity**Region 9****Tijuana River Estuary**

LOE ID:	76811
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Four of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 911_6001, 911_6004, 911_6009, 911_6010, 911_6012 Tijuana River Estuary.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 52819, Toxicity**Region 9****Tijuana River Estuary**

LOE ID:	76806
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. None of the three samples exhibited

Data Reference:	statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites. Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 911TRE_2003, 911TRE_2004, and 911TRE_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	33318	Region 9
Tijuana River Estuary		

Pollutant:	Low Dissolved Oxygen
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. There were 18219 of 42308 samples that exceeded the Basin Plan criteria, and these exceed the allowable frequency of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33318, Low Dissolved Oxygen**Region 9****Tijuana River Estuary**

LOE ID:	647
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	19949
Number of Exceedances:	7624
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1997 and 1998. There were 7624 of 19949 samples that were below the minimum standard.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River Estuary site OS.
Temporal Representation:	Samples were collected in 30 minute intervals from 04/01/1997 to 09/29/1997 and 01/01/1998 to 12/31/1998. Samples were collected from 04/1997 to 09/1997 and during every month in 1998, and at least 2-3 days per month are represented. Samples were not always collected daily.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33318, Low Dissolved Oxygen**Region 9****Tijuana River Estuary**

LOE ID:	646
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1375
Number of Exceedances:	378
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1999. There were 378 of 1375 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River Estuary site OS.
Temporal Representation:	Samples were collected every 30 minutes from 03/01/1999 to 03/29/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33318, Low Dissolved Oxygen	Region 9
Tijuana River Estuary	

LOE ID:	645
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	20879
Number of Exceedances:	10212
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1997-1998. There were 10212 of 20879 samples that were below the minimum standard.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana River Estuary site TL.
Temporal Representation:	Samples were collected every 30 minutes from 05/23/1997 to 12/27/1998. During each month, some data were missing, often only over the course of a day or two. Overall, that majority of days per month are represented. Sampling did not occur in 09/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33318, Low Dissolved Oxygen	Region 9
Tijuana River Estuary	

LOE ID:	643
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1997 and 1998. Ninety-three of 93 samples were in below the minimum standard. All 8 reported averages for 1997 and 1998 were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River Estuary. Exact sample location was not reported.
Temporal Representation:	Samples were collected 5-31 times per month from 01/03/1998 to 05/31/1998. Samples were also collected in May, July and August 1997 and June-November, 1998, but only monthly averages were reported with the data set.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33318, Low Dissolved Oxygen

Region 9

Tijuana River Estuary

LOE ID:	642
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	From the letter from San Diego Baykeeper written on 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
	Submittal was narrative. There is insufficient information given to determine which beneficial uses may or may not be supported.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland

surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The reported area is the Tijuana River Estuary. Exact location was not given.

Temporal Representation:

The letter regarding impairment was written on 06/14/2004. A more specific time of impairment was not reported.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33318, Low Dissolved Oxygen

Region 9

Tijuana River Estuary

LOE ID: 644

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 12

Number of Exceedances: 5

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the Tijuana National Estuarine Research Reserve in 1998. Five of 12 averages were below the minimum standard.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Tijuana River Estuary. Exact sampling location was not reported.

Temporal Representation:

Samples were collected from 01/1998 to 12/1998. Only monthly averages were reported.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID 52234

Region 9

Tijuana River Estuary

Pollutant: Arsenic

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. One of one sample (shellfish tissue) and zero of five samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample (tissue) and zero of five samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52234, Arsenic

Region 9

Tijuana River Estuary

LOE ID:	78359
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).

Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 52234, Arsenic

Region 9

Tijuana River Estuary

LOE ID:	76815
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends

(NS&T). Mussels are shipped to NOAA's contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAA's NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	52282	Region 9
Tijuana River Estuary		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status for pollutants in tissue; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (shellfish tissue) and zero of two samples (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (shellfish tissue) and zero of two samples (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52282, Endrin	Region 9
Tijuana River Estuary	

LOE ID:	76838
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site TJRE.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 52282, Endrin
Tijuana River Estuary**

Region 9

LOE ID:	78367
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Tijuana River Estuary to determine beneficial use support and results are as follows: a total of 5 samples were collected and they were all non-detect, however 3 samples were not used in analysis because when the method

Data Reference:	detection limit was organic carbon normalized, the results were above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Tijuana River Estuary was collected at 5 monitoring sites [911_6012, 911_6010, 911_6009, 911_6004, 911_6001]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	41464	Region 9
Tijuana River Estuary		

Pollutant:	Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record. The Information is based on visual observations and not supported by numerical data. Visual observation information alone is insufficient to place a water body segment pollutant combination on the section 303(d) list because it cannot be quantitatively determined if applicable water quality standards are met.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41464, Solids	Region 9
Tijuana River Estuary	

LOE ID:	658
Pollutant:	Solids
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Estuarine Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	From a letter from San Diego Baykeeper, dated 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No objectives could be found for solids in an estuary. Objectives were available (in the Basin Plan and CTR) only for inland surface waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The impaired area is identified as the Tijuana River Estuary. Exact location was not given.
Temporal Representation:	The letter was dated 06/14/2004. A specific time for the impairment was not given.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	40563	Region 9
Tijuana River Estuary		

Pollutant:	Synthetic Organics
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40563, Synthetic Organics	Region 9
Tijuana River Estuary	

LOE ID:	659
Pollutant:	Synthetic Organics
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	From a letter from San Diego Baykeeper, dated 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No objective is available for the sum of synthetic organics.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The impaired area is identified as the Tijuana River Estuary. Exact location was not given.
Temporal Representation:	The letter was dated 06/14/2004. A specific time for the impairment was not given.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33747	Region 9
Tijuana River Estuary		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. There were 3,413 of 33,657 samples that were in exceedance of the water quality objective for pH and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33747, pH	Region 9
Tijuana River Estuary	

LOE ID: 653

Pollutant: pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	14281
Number of Exceedances:	555
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1997-1998. 555 of 14281 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For bays and estuaries and all beneficial uses, the WQO for pH is 7.0 (minimum) to 9.0 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River Estuary site TL.
Temporal Representation:	Samples were collected every 30 minutes from 05/23/1997 to 12/27/1998. During each month, a day or two worth of data was often missing, but the majority of days/times were represented. pH samples were not collected in 09/1997, 04/1998, 05/1998, 08/1998, 09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33747, pH

Region 9

Tijuana River Estuary

LOE ID:	652
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	1375
Number of Exceedances:	68
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1999. Sixty-eight of 1375 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For bays and estuaries and all beneficial uses, the WQO for pH is 7.0 (minimum) to 9.0 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana River Estuary site OS.

Temporal Representation:	Samples were collected every 30 minutes from 03/01/1999 to 03/29/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33747, pH Tijuana River Estuary

Region 9

LOE ID:	654
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	18001
Number of Exceedances:	2790
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1997 and 1998. There were 2790 of 18001 samples that did not meet standards. The majority of samples that did not meet standards were below the minimum standard (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For bays and estuaries and all beneficial uses, the WQO for pH is 7.0 (minimum) to 9.0 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River Estuary site OS.
Temporal Representation:	Samples were collected in 30 minute intervals from 04/01/1997 to 09/29/1997 and 01/28/1998 to 12/31/1998. Samples were collected on at least 2-3 days per sampling month. Data for several days per month were missing, but the majority of every month was represented.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 34508

Region 9

Tijuana River Estuary

Pollutant:	Eutrophic
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34508, Eutrophic

Region 9

Tijuana River Estuary

LOE ID:	4669
Pollutant:	Eutrophic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

33828

Region 9

Tijuana River Estuary

Pollutant:	Nickel
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33828, Nickel
Tijuana River Estuary**

Region 9

LOE ID: 4672

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Estuarine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

**DECISION ID 34064
Tijuana River Estuary**

Region 9

Pollutant: Pesticides
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 34064, Pesticides

Region 9

Tijuana River Estuary

LOE ID:	4673
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

34079

Region 9

Tijuana River Estuary

Pollutant:	Thallium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34079, Thallium

Region 9

Tijuana River Estuary

LOE ID:	4674
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

33705

Region 9

Tijuana River Estuary

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33705, Trash

Region 9

Tijuana River Estuary

LOE ID:	4675
Pollutant:	Trash
LOE Subgroup:	Visual
Matrix:	Not Specified
Fraction:	Not Recorded
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	33667	Region 9
Tijuana River Estuary		

Pollutant:	Turbidity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. There were 4965 of 28167 samples that exceeded the Basin Plan criteria, and these exceed the allowable frequency of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33667, Turbidity
Tijuana River Estuary

Region 9

LOE ID:	649
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	1375
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1999. There were 1,372 of 1,375 samples that ranged from 0-35 NTU. Three of 1,375 samples were between 206 and 992 NTU.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For lagoons and estuaries and all beneficial uses, the maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 NTU. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over natural turbidity.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the above limits.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Tijuana River Estuary site OS.
Temporal Representation:	Samples were collected every 30 minutes from 03/01/1999 to 03/29/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33667, Turbidity
Tijuana River Estuary

Region 9

LOE ID:	650
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	8559

Number of Exceedances:

Data and Information Type:
Data Used to Assess Water Quality:

Not Specified

Data were collected by the Tijuana River NERR in 1998. There were 7,055 of 8,559 samples that were 20 ntu or lower. There were 1,601 of 8,559 samples that were above 21 NTU. The highest turbidity recorded was 1,388 ntu. Some negative turbidity were recorded as well.

Data Reference:

[Placeholder reference 2006 303\(d\)](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan: For lagoons and estuaries and all beneficial uses, the maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 NTU. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over natural turbidity.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the above limits.

Guideline Reference:

[Placeholder reference 2006 303\(d\)](#)

Spatial Representation:

Samples were collected at the Tijuana River Estuary site TL.

Temporal Representation:

Samples were collected every 30 minutes from 01/01/1998 to 12/27/1998. During the sampling months, data for some day were not recorded. During the months in which samples were collected, at least 2-3 days worth of data were recorded. Samples were not recorded in 08/1997, 09/1997, 03/1998, 04/1998, 08/1998, and 09/1998.

Environmental Conditions:

Possible storm event(s) occurred during some sampling months.

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33667, Turbidity

Region 9

Tijuana River Estuary

LOE ID:

648

Pollutant:

Turbidity

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total

Beneficial Use:

Marine Habitat

Number of Samples:

5

Number of Exceedances:

Data and Information Type:

Not Specified

Data Used to Assess Water Quality:

Data were collected by the San Diego RWQCB in 1997 and 1998. Five monthly averages were reported. Average turbidity levels ranged from 23-130.

Data Reference:

[Placeholder reference 2006 303\(d\)](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan: For lagoons and estuaries and all beneficial uses, the maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 ntu. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over natural turbidity.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:	The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the above limits.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Tijuana River Estuary. Exact sample location was not reported.
Temporal Representation:	Samples were collected in 12/1997 and 02-04/1998 and 10/1998. Only averages were reported.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33667, Turbidity

Region 9

Tijuana River Estuary

LOE ID:	651
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	18228
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Tijuana River NERR in 1997 and 1998. There were 14,872 of 18228 samples that had turbidity levels of 20 NTU or lower. There were 3,356 of the 18,228 samples that had turbidity levels of 21 NTU or higher. The highest turbidity reading occurred in 02/1998 with a reading of 998 NTU.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For lagoons and estuaries and all beneficial uses, the maximum increase when Natural Turbidity is 0-50 NTU is 20 % over natural turbidity. The Maximum Increase when Natural Turbidity is 50-100 NTU is 20 NTU. The Maximum Increase when Natural Turbidity is >100 NTU is 10 % over natural turbidity.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the above limits.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at the Tijuana River Estuary site OS.
Temporal Representation:	Samples were collected in 30 minute intervals from 04/01/1997 to 09/29/1997 and 02/13/1998 to 12/31/1998. Samples were collected from 04/1997 to 09/1997 and during every month in 1998 except 01/1998 and 05/1998. Sampling represents at least 2 days in each sampling month, and usually were not collected during all days in the month.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Guajome Lake](#)
Water Body ID: CAL9031100019990208142145
Water Body Type: Lake & Reservoir

DECISION ID	34647	Region 9
Guajome Lake		

Pollutant: Eutrophic
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34647, Eutrophic Guajome Lake

Region 9

LOE ID: 4453

Pollutant: Eutrophic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Marcos Lake](#)
Water Body ID: CAL9045200019991117152408
Water Body Type: Lake & Reservoir

DECISION ID	50511	Region 9
San Marcos Lake		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Enterococcus, Zero of the the Three samples exceeded the Water Quality Objective for Escherichia coli (E. coli), Zero of the Three samples exceeded the Water Quality Objective for Fecal Coliform, and Zero of the Three samples exceeded the Water Quality Objective for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the Three samples exceed the Water Quality Objective for Enterococcus, Zero of the the Three samples exceeded the Water Quality Objective for Escherichia coli (E. coli), Zero of the Three samples exceeded the Water Quality Objective for Fecal Coliform, and Zero of the Three samples exceeded the Water Quality Objective for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50511, Indicator Bacteria	Region 9
San Marcos Lake	

LOE ID: 76020
Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the three samples exceeded the enterococcus objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The enterococcus concentration shall not exceed more than 235/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 2, 5, and 6.
Temporal Representation:	Samples were collected on May 18, 2009.
Environmental Conditions:	
QAPP Information:	No QAPP documents were included with the Regional Board Lab data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50511, Indicator Bacteria

Region 9

San Marcos Lake

LOE ID:	76021
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the three samples exceeded the E. Coli objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E. Coli concentration shall not exceed more than 235/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 2, 5, and 6.
Temporal Representation:	Samples were collected on May 18, 2009.
Environmental Conditions:	
QAPP Information:	No QAPP documents were included with the Regional Board Lab data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50511, Indicator Bacteria

Region 9

San Marcos Lake

LOE ID:	76022
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the three samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The fecal coliform concentration shall not exceed more than 235/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 2, 5, and 6.
Temporal Representation:	Samples were collected on May 18, 2009.
Environmental Conditions:	
QAPP Information:	No QAPP documents were included with the Regional Board Lab data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50511, Indicator Bacteria

Region 9

San Marcos Lake

LOE ID:	76027
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the three samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The total coliform concentration shall not exceed more than 235/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 2, 5, and 6.
Temporal Representation:	Samples were collected on May 18, 2009.
Environmental Conditions:	

QAPP Information:
QAPP Information Reference(s):

No QAPP documents were included with the Regional Board Lab data.

DECISION ID	50512	Region 9
San Marcos Lake		

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the Two samples exceed the Water Quality Criteria for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Two samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50512, Lead	Region 9
San Marcos Lake	

LOE ID: 76023

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality: One of two samples exceeded the hardness adjusted criteria. One non-detect result was not included in the assessment because the reporting limit was not provided.
Data Reference: [Data for Various Pollutants in Region 9, 2002-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Four samples were collected from Lake San Marcos at Sites 2 and 4(near Dam), Site 5 (near picnic area) and Site 6 (near Marina). Sites 2 and 4 were averaged prior to assessment.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.
QAPP Information Reference(s):	

DECISION ID	50513	Region 9
San Marcos Lake		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Criteria for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Three samples exceeded the Water Quality Criteria for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

San Marcos Lake

LOE ID:	76024
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted criteria.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Four samples were collected from Lake San Marcos at Sites 2 and 4(near Dam), Site 5 (near picnic area) and Site 6 (near Marina). Sites 2 and 4 were averaged prior to assessment.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.
QAPP Information Reference(s):	

DECISION ID

50514

Region 9

San Marcos Lake

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Basin Plan Objective for Oxygen, Dissolved.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Basin Plan Objective for Oxygen, Dissolved and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50514, Oxygen, Dissolved
San Marcos Lake**

Region 9

LOE ID:	76025
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 3 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations 2, 5, and 6.
Temporal Representation:	Samples were collected thrice in 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

**DECISION ID 50515
San Marcos Lake**

Region 9

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50515, Zinc
San Marcos Lake**

Region 9

LOE ID: 76043

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality: The reporting limits were not provided so these data could not be assessed.
Data Reference: [Data for Various Pollutants in Region 9, 2002-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were

Guideline Reference: available, a value of 100 mg/L was used.
[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Four samples were collected from Lake San Marcos at Sites 2 and 4(near Dam), Site 5 (near picnic area) and Site 6 (near Marina). Sites 2 and 4 were averaged prior to assessment.

Temporal Representation: Samples were collected on 5/18/2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.

QAPP Information Reference(s):

DECISION ID	50516	Region 9
San Marcos Lake		

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the Three samples exceed the Water Quality Objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of Three samples exceeded the Water Quality Objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50516, pH	Region 9
San Marcos Lake	

LOE ID: 76026

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 3 minimums and maximums of pH data had 3 exceedences.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations 2, 5, and 6.
Temporal Representation:	Samples were collected thrice in May 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	44877	Region 9
San Marcos Lake		

Pollutant:	Ammonia as Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. Three of three of samples exceed the Basin Plan water quality objective for ammonia.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of three of samples exceed the Basin Plan water quality objective for ammonia, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 44877, Ammonia as Nitrogen
San Marcos Lake

Region 9

LOE ID:	774
Pollutant:	Fish Kills
LOE Subgroup:	Narrative Description Data
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	There is no numeric data concerning low dissolved oxygen. Information that low dissolved oxygen is potentially a problem was found in the conversation with D. Gibson on 10/2/01 (Lake San Marcos Community Association, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration in ocean waters shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The comments from citizens do not give a specific location on the lake.
Temporal Representation:	The notes concerning low DO are from a conversation on 10/2/01.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44877, Ammonia as Nitrogen
San Marcos Lake

Region 9

LOE ID:	775
Pollutant:	Fish Kills
LOE Subgroup:	Narrative Description Data
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	There was no numerical data pertaining to dissolved oxygen submitted. Information from the Lake San Marcos Community Association concerning a fish kill in the lake was dated May 9, 2001. The letter says that several fish kills occurred during summer months and that representatives from the California Fish and Game and the San Diego County Department of Health have confirmed that the fish kill was due to a lack of oxygen (Lake San Marcos Community Association, 2001).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration in ocean waters shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	No specific locations of the lake were reported in the document.
Temporal Representation:	The document is dated May 9, 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44877, Ammonia as Nitrogen
San Marcos Lake

Region 9

LOE ID:	776
Pollutant:	Abnormal Fish deformities, erosions, lesions, tumors (DELTS)
LOE Subgroup:	Adverse Biological Responses
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	A photo of an abnormal growth on a fish gill plate was taken on April 15, 2001 and submitted in a letter dated May 9, 2001 by the Lake San Marcos Community Association. Other data concerning nutrients and solids was collected and analyzed in May 2001 (Lake San Marcos Community Association, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	No specific location is given as to where the fish was caught.
Temporal Representation:	The fish with an abnormal gill was caught on April 15, 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44877, Ammonia as Nitrogen
San Marcos Lake

Region 9

LOE ID:	768
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three out of 3 samples were in exceedance. Samples were collected at the San Marcos Lake in May 2001, by the Lake San Marcos Community Association. Three samples were analyzed for Ammonia as N by Enviromatrix Analytical Inc. (Lake San Marcos Community Association, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Ammonia, unionized. Maximum 0.025 mg/L. Discharge of wastes shall not cause concentrations of NH3 to exceed this limit (as N) in these waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Three stations: outfall, cross bridge, and park dock were sampled.
Temporal Representation:	All samples were taken on one day in May 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	50505	Region 9
San Marcos Lake		

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the Three samples exceed the Water Quality Criteria for Copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of Three samples exceed the Water Quality Criteria for Copper and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 50505, Copper
San Marcos Lake**

Region 9

LOE ID:	76009
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	Two of the three samples exceeded the hardness adjusted criteria.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Four samples were collected from Lake San Marcos at Sites 2 and 4(near Dam), Site 5 (near picnic area) and Site 6 (near Marina). Sites 2 and 4 were averaged prior to assessment.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.
QAPP Information Reference(s):	

**DECISION ID 44428
San Marcos Lake**

Region 9

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. All three of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All samples exceed the phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:**Line of Evidence (LOE) for Decision ID 44428, Phosphorus
San Marcos Lake****Region 9**

LOE ID:	769
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three out of 3 samples were in exceedance. The three samples were collected by the Lake San Marcos Community Association on May 9, 2001. The data was analyzed on May 12, 2001 by Enviromatrix Analytical, Inc. (Lake San Marcos Community Association, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan. Total Phosphorus: The maximum, threshold - not to be exceeded more than 10% of the time is 0.025 mg/L for inland surface waters-any standing body of water.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	From the Basin Plan: Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One sample was taken at each of three locations on the lake: Outfall, Cross Bridge, and Park Dock.
Temporal Representation:	Samples were collected on one day, May 9, 2001.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

QA Info Missing

DECISION ID	43066	Region 9
San Marcos Lake		

Pollutant:	Foam/Flocs/Scum/Oil Slicks
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for listing under sections 2.1, 3.6, and 3.10 of the Listing Policy.

Under section 3.6, a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status. One line of evidence is required are available in the administrative record to assess foams, flocculants, and oil slicks. Two lines of evidence are required for scum.

Scum data is not backed by any nutrient data and therefore cannot be used as the basis for a listing on its own (section 2 of the Listing Policy).

Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).

Two photos taken by a citizen that were submitted by the Lake San Marcos Community Association were used. They show white foam and oil discoloration on the surface of the water. These photos are not enough information to list this waterbody for these pollutants.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43066, Foam/Flocs/Scum/Oil Slicks	Region 9
San Marcos Lake	

LOE ID:	777
Pollutant:	Foam/Flocs/Scum/Oil Slicks
LOE Subgroup:	Visual
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two photos taken by a citizen, submitted by the Lake San Marcos Community Association were used. They show white foam and oil discoloration on the surface of the water. (Lake San Marcos Community Association, 2001).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.</p> <p>Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The location of both photos is at the lake inlet.
Temporal Representation:	Both photos were taken in February 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	32744	Region 9
San Marcos Lake		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of three samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of three samples exceed the Basin Plan water quality objective for total dissolved solids, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32744, Total Dissolved Solids		Region 9
San Marcos Lake		

LOE ID:	770
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three out of 3 samples were in exceedance. Samples were collected by the Lake San Marcos Community Association on May 9, 2001. The samples were analyzed by Enviromatrix Analytical, Inc on May 14, 2001 (Lake San Marcos Community Association, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Total Dissolved Solids: 500 units
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Concentration not to be exceeded more than 10% of the time during any one year period.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Three samples were collected on the lake, one each at West Discovery Bridge, LMS Side Discovery Bridge, and LMS Wake Bridge.
Temporal Representation:	Samples were collected once on May 9, 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	32745	Region 9
San Marcos Lake		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Sources: Expected TMDL Completion Date: Impairment from Pollutant or Pollution:	Nutrients List on 303(d) list (TMDL required list) List on 303(d) list (TMDL required list)(2012) Original Source Unknown 2019 Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Six of six samples exceed the Basin Plan water quality objective for nutrients.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of three samples exceed the Basin Plan water quality objective for nutrients, and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This is a decision made by the State Water Resources Control Board and approved by the USEPA in 2006 . No new data were assessed by the Regional Board for 2008. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32745, Nutrients

Region 9

San Marcos Lake

LOE ID:	772
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three out of 3 samples were in exceedance. Samples were collected at the San Marcos Lake in May 2001, by the Lake San Marcos Community Association. Three samples were analyzed for Ammonia as N by Enviromatrix Analytical Inc. (Lake San Marcos Community Association, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Ammonia, unionized. Maximum 0.025 mg/L. Discharge of wastes shall not cause concentrations of NH3 to exceed this limit (as N) in these waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Three stations: outfall, cross bridge, and park dock were sampled
Temporal Representation:	All samples were taken on one day in May 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32745, Nutrients

Region 9

San Marcos Lake

LOE ID:	771
Pollutant:	Nutrients
LOE Subgroup:	Narrative Description Data
Matrix:	Not Specified
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The data include notes from a conversation with D. Gibson on 10/1/01 and a note from a citizen (Thielen), submitted by the Lake San Marcos Community Association (Lake San Marcos Community Association, 2001). Information includes notes from a conversation with D. Gibson and a note from a citizen concerning nutrients and their sources. Notes mention that the water is potentially impaired but there doesn't appear to be enough data to support that it is impaired.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Inland surface waters, bays and estuaries, and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Descriptions seem to include the entire lake.
Temporal Representation:	Descriptions are dated from February 2001 to around November 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32745, Nutrients

Region 9

San Marcos Lake

LOE ID:	773
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three out of 3 samples were in exceedance. The three samples were collected by the Lake San Marcos Community Association on May 9, 2001. The data was analyzed on May 12, 2001 by Enviromatrix Analytical, Inc. (Lake San Marcos Community Association, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan. Total Phosphorus: The maximum, threshold - not to be exceeded more than 10% of the time is 0.025 mg/L for inland surface waters-any standing body of water.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:	From the Basin Plan: Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One sample was taken at each of three locations on the lake: Outfall, Cross Bridge, and Park Dock.
Temporal Representation:	Samples were collected on one day, May 9, 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Hodges, Lake](#)
Water Body ID: CAL9052100020010925094906
Water Body Type: Lake & Reservoir

DECISION ID	33417	Region 9
Hodges, Lake		

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of the Fifteen samples exceed the Basin Plan Objective for Aluminum.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Fifteen samples exceeded the Basin Plan Objective for Aluminum and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33417, Aluminum	Region 9
Hodges, Lake	

LOE ID: 778
Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. One of 15 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all inland surface waters the WQO for Aluminum for a BU of MUN is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected on a somewhat quarterly basis between January 1996 and September 2000. Two to 4 samples were collected each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44169	Region 9
Hodges, Lake		

Pollutant:	Ammonia as Nitrogen
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An unknown number of the eighteen samples exceed the water quality objective for ammonia. The wrong methodology was used to assess the data previously. The data has been re-assessed and there is insufficient information available to calculate, with the power and confidence of the Listing Policy, the amount of un-ionized ammonia. The available information does not allow for an accurate determination of the correct pH and temperature for the calculation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. An unknown number of the eighteen samples exceed the water quality objective for ammonia.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 44169, Ammonia as Nitrogen

Region 9

Hodges, Lake

LOE ID:	6159
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	City of San Diego, 2007a. Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for un-ionized ammonia (NH ₃) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Lake Hodges at a standard location designated "Station AA".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	

DECISION ID

46365

Region 9

Hodges, Lake

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Basin Plan Objective for Chromium.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Eight samples exceeded the Basin Plan Objective for Chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 46365, Chromium
Hodges, Lake**

Region 9

LOE ID:	785
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and March 2000. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with municipal beneficial uses, the WQO for chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected between January 1996 and March 2000. 1-4 samples were collected per year. There are no measurements listed for 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33093
Hodges, Lake

Region 9

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Other
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. 10 of the 10 samples exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33093, Total Dissolved Solids

Region 9

Hodges, Lake

LOE ID: 800

Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	10
Number of Exceedances:	10

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. from September 1998 to December 2000. Ten of the 10 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected from September 1998 to December 2000. Samples were collected quarterly in 1999 and 2000. Two samples were collected in 1998, 1 in September, and 1 in December.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33448	Region 9
Hodges, Lake		

Pollutant:	Color
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. Twenty out of 20 samples exceeded the Basin Plan objective. Even though more data is needed to determine if the water quality objective is exceeded with the confidence and power required by the Listing Policy, a minimum of 122 samples would be needed before 20 exceedances would result in a delisting. 2. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33448, Color	Region 9
Hodges, Lake	

LOE ID:	786
Pollutant:	Color
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. from March 1996 to

Data Reference:	December 2000. Twenty of 20 samples were in exceedance. Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected quarterly from March 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32608	Region 9
Hodges, Lake		

Pollutant:	Nitrogen
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows (with update to table 3.1):</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of 98 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty three of the 98 samples from two combined lines of evidence exceeded the Basin Plan Criteria. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
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Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 32608, Nitrogen	Region 9
Hodges, Lake	

LOE ID:	809
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	81
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA at several depths by the City of San Diego Water Dept. from January 1997 to July 2001. Eight of the 81 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters with all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. For this assessment, the N:P ratio was used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HGA at depths of 0m, 3m, 12m, and 1ft above the bottom.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32608, Nitrogen Hodges, Lake

Region 9

LOE ID:	808
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from March 1997 to July 2001. Seventeen of the 17 samples exceeded the N:P ratio of 10:1. In addition, the phosphorus samples were all in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters with all beneficial uses, analogous threshold values have not

been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. For this assessment, the N:P ratio was used.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Hodges Reservoir at HG Rec Area Delivery Point.

Temporal Representation:

Samples were collected on a quarterly basis from March 1997 to July 2001.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	32607	Region 9
Hodges, Lake		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Sixty of the 97 samples from two combined lines of evidence exceeded the Basin Plan Criteria, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
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Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>
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Line of Evidence (LOE) for Decision ID 32607, Phosphorus	Region 9
Hodges, Lake	

LOE ID:	807
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	80
Number of Exceedances:	44
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA at several depths by the City of San Diego Water Dept. from January 1997 to July 2001. Forty-four of the 80 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - any standing body of water, and all beneficial uses, the WQO for total phosphorus is 0.025 mg/L. This is the maximum, threshold - not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Hodges Reservoir at HG Station A at depths of 0m, 3m, 12m, and 1ft. from the bottom.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32607, Phosphorus

Region 9

Hodges, Lake

LOE ID:	806
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from March 1997 to July 2001. Sixteen of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - any standing body of water, and all beneficial uses, the WQO for total phosphorus is 0.025 mg/L. This is the maximum, threshold - not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Hodges Reservoir at the HG Rec Area Delivery Point.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

DECISION ID	46366	Region 9
Hodges, Lake		

Pollutant: 1,1,1-Trichloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46366, 1,1,1-Trichloroethane	Region 9
Hodges, Lake	

LOE ID: 810
Pollutant: 1,1,1-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 20
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)
Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33481	Region 9
Hodges, Lake		

Pollutant:	1,1,2,2-Tetrachloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33481, 1,1,2,2-Tetrachloroethane	Region 9
Hodges, Lake	

LOE ID:	811
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33401	Region 9
Hodges, Lake		

Pollutant:	1,1,2-Trichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33401, 1,1,2-Trichloroethane	Region 9
Hodges, Lake	

LOE ID:	812
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46321	Region 9
Hodges, Lake		

Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46321, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	Region 9
Hodges, Lake	

LOE ID:	813
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1-Dichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32609	Region 9
Hodges, Lake		

Pollutant:	1,2,4-Trichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32609, 1,2,4-Trichlorobenzene	Region 9
Hodges, Lake	

LOE ID:	814
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir at site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46318	Region 9
Hodges, Lake		

Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46318, 1,2-Dibromo-3-chloropropane (DBCP)**Region 9****Hodges, Lake**

LOE ID:	815
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dibromo-3-chloropropane (DBCP) is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir at site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**33622****Region 9****Hodges, Lake**

Pollutant:	1,2-Dichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33622, 1,2-Dichloroethane
Hodges, Lake**

Region 9

LOE ID:	816
Pollutant:	1,2-Dichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloroethane is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

**DECISION ID 33074
Hodges, Lake**

Region 9

Pollutant:	1,2-Dichloroethylene,-trans
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

- This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33074, 1,2-Dichloroethylene,-trans
Hodges, Lake

Region 9

LOE ID:	831
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2-Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID
Hodges, Lake

46376

Region 9

Pollutant:	1,2-Dichloropropane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:
Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the

2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 46376, 1,2-Dichloropropane
Hodges, Lake**

Region 9

LOE ID:	817
Pollutant:	1,2-Dichloropropane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloropropane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
Hodges, Lake**

33446

Region 9

Pollutant: Alachlor
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Do Not List on 303(d) list (TMDL required list)(2012)

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollution

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33446, Alachlor
Hodges, Lake**

Region 9

LOE ID:	833
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
Hodges, Lake**

33418

Region 9

Pollutant:

Antimony

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Ten samples exceed the Basin Plan Objective for Antimony.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Ten samples exceeded the Basin Plan Objective for Antimony and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33418, Antimony
Hodges, Lake**

Region 9

LOE ID:	779
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and September 1999. None of the 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.

Temporal Representation:	Samples were collected between January 1996 and September 1999. Samples for 1996 and 1997 were collected on a quarterly basis, while for 1998 and 1999, there was one sample per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment
QAPP Information Reference(s):	

DECISION ID	33394	Region 9
Hodges, Lake		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 19 samples exceeded the Basin Plan's water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33394, Arsenic	Region 9
Hodges, Lake	

LOE ID:	780
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. None of the 19 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at site HGA-0.

Temporal Representation: Samples were collected on a quarterly basis from January 1996 to September 2000.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	33447	Region 9
Hodges, Lake		

Pollutant: Atrazine

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status: Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 12 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33447, Atrazine	Region 9
Hodges, Lake	

LOE ID: 834

Pollutant: Atrazine

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 12 samples were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a somewhat quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33407	Region 9
Hodges, Lake		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceeded the Basin Plan's water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33407, Barium	Region 9
Hodges, Lake	

LOE ID:	781
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected on a quarterly basis between January 1996 and September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46375	Region 9
Hodges, Lake		

Pollutant:	Benzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 46375, Benzene		Region 9
Hodges, Lake		

LOE ID:	818
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33677	Region 9
Hodges, Lake		

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33677, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	Region 9
Hodges, Lake	

LOE ID:	835
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzo(a)pyrene is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33113	Region 9
Hodges, Lake		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33113, Cadmium	Region 9
Hodges, Lake	

LOE ID: 782

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. on June 3, 1996. One sample was collected. It was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	One sample was collected on June 3, 1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32674	Region 9
Hodges, Lake		

Pollutant:	Carbofuran
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Hodges, Lake

LOE ID:	845
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 03/1997 to 07/2001. None of the 17 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a somewhat quarterly basis from 03/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33091

Region 9

Hodges, Lake

Pollutant:	Carbon tetrachloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33091, Carbon tetrachloride
Hodges, Lake**

Region 9

LOE ID:	819
Pollutant:	Carbon tetrachloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbon tetrachloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
Hodges, Lake**

33315

Region 9

**Pollutant:
Final Listing Decision:
Last Listing Cycle's Final
Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Chlordane
Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33315, Chlordane

Region 9

Hodges, Lake

LOE ID:	844
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/1997 to 07/2001. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for total chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected between 1 and 4 times per year from 02/1997 to 07/2001. No samples were collected in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33316

Region 9

Hodges, Lake

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of 40 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 40 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33316, Chloride

Region 9

Hodges, Lake

LOE ID:	784
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from March 1997 to June 2001. None of the 18 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The WQO for chloride for inland surface waters is 500 mg/L
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HG Rec Area Delivery Point.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33316, Chloride

Region 9

Hodges, Lake

LOE ID:	783
Pollutant:	Chloride

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between March 1996 and June 2001. None of the 22 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQo for chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected on a quarterly basis from March 1996 and June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33325	Region 9
Hodges, Lake		
Pollutant:	Chlorobenzene (mono)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met. 	
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>	

Hodges, Lake

LOE ID:	820
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33449

Region 9

Hodges, Lake

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33449, Copper**Region 9****Hodges, Lake**

LOE ID:	787
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and June 2000. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected from January 1996 to June 2000. 1-4 samples were collected per year. There are no measurements reported for 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**43315****Region 9****Hodges, Lake**

Pollutant:	Dissolved oxygen saturation
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the 27 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list</p>

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 27 samples exceeded the Basin Plan objective for Dissolved Oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 43315, Dissolved oxygen saturation

Region 9

Hodges, Lake

LOE ID:	6160
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of twenty seven surface water samples are below the water quality objective. The annual mean in 2005 is 8.96 mg/L and in 2006 is 6.39 mg/L. These exceed the objective 37 percent of the time. Data was collected by the City of San Diego Water Department for monitoring of their drinking source water reservoirs. Sampling occurred from January 2005 to December 2006.
Data Reference:	Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/L in waters with designated WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses . The annual mean shall not be less than 7 mg/L more than 10 percent of the time (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Lake Hodges at a standard location designated "Station AA". Dissolve oxygen depth profile data was collected during sampling however only the uppermost subsurface sample was used in this data review.
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

DECISION ID

33691

Region 9

Hodges, Lake

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33691, Endrin

Region 9

Hodges, Lake

LOE ID:	836
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Pollutant:	Ethylbenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33741, Ethylbenzene	Region 9
Hodges, Lake	

LOE ID:	821
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003)
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.

Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33460	Region 9
Hodges, Lake		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceeded the Basin Plan objective, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33460, Fluoride	Region 9
Hodges, Lake	

LOE ID:	788
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between March 1996 and September 2000. None of the 19 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Fluoride is 2.4 mg/L when Annual Average of Maximum Daily Air Temperature is <53.8F,

2.2 mg/L when Annual Average of Maximum Daily Air Temperature is 53.8F-58.3F, 2.0 mg/L when Annual Average of Maximum Daily Air Temperature is 58.4F-63.8F, 1.8 mg/L when Annual Average of Maximum Daily Air Temperature is 63.9F-70.6F, 1.6 mg/L when Annual Average of Maximum Daily Air Temperature is 70.7F-79.2F, and 1.4 mg/L when Annual Average of Maximum Daily Air Temperature is 79.3F-90.5F. For inland surface water with all other beneficial uses the WQO for fluoride is 1.0 mg/L.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at site HGA-0.

Temporal Representation:

Samples were collected on a quarterly basis from March 1996 to September 2000.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	32732	Region 9
Hodges, Lake		

Pollutant:	Glyphosate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32732, Glyphosate	Region 9
Hodges, Lake	

LOE ID:	848
Pollutant:	Glyphosate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 03/1997 to 07/2001. None of the 17 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Glyphosate is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46374	Region 9
Hodges, Lake		

Pollutant:	Heptachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46374, Heptachlor	Region 9
Hodges, Lake	

LOE ID:	838
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33191	Region 9
Hodges, Lake		

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33191, Heptachlor epoxide	Region 9
Hodges, Lake	

LOE ID:	837
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33237	Region 9
Hodges, Lake		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33237, Hexachlorobenzene/ HCB	Region 9
Hodges, Lake	

LOE ID:	839
Pollutant:	Hexachlorobenzene/ HCB

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	33238	Region 9
Hodges, Lake		

Pollutant:	Hexachlorocyclopentadiene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33238, Hexachlorocyclopentadiene	Region 9
Hodges, Lake	

LOE ID: 840

Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33461	Region 9
Hodges, Lake		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 5 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33461, Iron	Region 9
Hodges, Lake	

LOE ID:	789
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by City of San Diego Water Dept. between March 1998 and December 2000. One of the 5 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected between March 1998 and December 2000. One to 3 samples was collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33397	Region 9
Hodges, Lake		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Methoxychlor Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Hodges, Lake

LOE ID:	841
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from February 1997 to July 2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from February 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32675

Region 9

Hodges, Lake

Pollutant:	Molinate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32675, Molinate**Region 9****Hodges, Lake**

LOE ID:	846
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 03/1997 to 11/2000. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected from 03/1997 to 11/2000. Three to four samples were collected in 1997 and 1998 and 1 sample was collected in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**33371****Region 9****Hodges, Lake**

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33371, Nickel
Hodges, Lake**

Region 9

LOE ID:	792
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between June 1996 and June 1999. None of the 9 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use the WQO for nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected between June 1996 and June 1999. Two to three samples were collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
Hodges, Lake**

33680

Region 9

Pollutant:	Nitrate as Nitrate (NO3)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 97 samples from two combined lines of evidence exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 33680, Nitrate as Nitrate (NO3)

Region 9

Hodges, Lake

LOE ID:	805
Pollutant:	Nitrate as Nitrate (NO3)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from March 1997 to July 2001. None of the 17 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nitrate as NO3 is 45 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at HG Rec Area Delivery Point.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33680, Nitrate as Nitrate (NO3)

Region 9

Hodges, Lake

LOE ID:	804
Pollutant:	Nitrate as Nitrate (NO3)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	80
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1996 to July 2001. None of the 80 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nitrate as NO3 is 45 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA on the surface and at depths of 3m, 12m, and 1 ft above the bottom.
Temporal Representation:	Samples were collected between January 1996 and December July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32595	Region 9
Hodges, Lake		

Pollutant:	Nitrite as Nitrite NO2
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 30 samples exceeded the Basin Plan criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 32595, Nitrite as Nitrite NO2	Region 9
Hodges, Lake	

LOE ID:	793
Pollutant:	Nitrite as Nitrite NO2
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between January 1996 and March 1999. Thirty samples were collected, 0 were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nitrite (as N) is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected between January 1996 and March 1999. Eight to ten samples were collected throughout the year from 1996 to 1998. Three samples were collected in 1999, one each in January, February, and March.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32718	Region 9
Hodges, Lake		

Pollutant:	Oxamyl (Vydate)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32718, Oxamyl (Vydate)	Region 9
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Hodges, Lake

LOE ID:	847
Pollutant:	Oxamyl (Vydate)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 03/1997 to 07/2001. None of the 17 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Oxamyl is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a somewhat quarterly basis from 03/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	46373	Region 9
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Hodges, Lake

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 10 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Hodges, Lake

LOE ID:	832
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Adverse Biological Responses
Matrix:	-N/A
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on February 4, 1997 and May 6, 1997. None of the 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Polychlorinated Biphenyls is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were once on each day on February 4, 1997 and May 6, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

46319

Region 9

Hodges, Lake

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46319, Pentachlorophenol (PCP)**Region 9****Hodges, Lake**

LOE ID:	842
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 05/1997 to 03/2001. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected from 05/1997 to 03/2001. Two samples were collected per year from 05/1997 to 09/2000. One sample was collected in 2001, and one was collected on 03/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**46368****Region 9****Hodges, Lake**

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 46368, Picloram
Hodges, Lake**

Region 9

LOE ID:	795
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. between December 1998 and June 2000. None of the 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected from December 1998 to June 2000. One to two samples were collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
Hodges, Lake**

32550

Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.
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Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32550, Selenium

Region 9

Hodges, Lake

LOE ID:	796
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1996 to December 1998. None of the 9 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected from January 1996 to December 1998. Quarterly samples were collected in 1996 and 1997. Only one sample is reported for 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33103

Region 9

Hodges, Lake

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.
	One line of evidence is available in the administrative record to assess this pollutant. One sample was

collected and it did not exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33103, Silver
Hodges, Lake**

Region 9

LOE ID:	797
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. on September 12, 2000. One sample was collected. It was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all inland surface waters with a municipal beneficial use, the WQO for silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	One sample was collected on September 12, 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33398
Hodges, Lake**

Region 9

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 12 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33398, Simazine

Region 9

Hodges, Lake

LOE ID:	843
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 06/03/1996 to 07/2001. None of the 13 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected between 06/03/1996 and 07/2001. One to three samples were collected per year. One sample was collected on 06/03/1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32554

Region 9

Hodges, Lake

Pollutant:	Styrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 32554, Styrene
Hodges, Lake**

Region 9

LOE ID:	823
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. between January 1997 and August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33412
Hodges, Lake

Region 9

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Based on Table 3.1 in the Policy, the number of exceedences of this pollutant is below the minimum number of measured exceedences needed to place a water segment on the section 303(d) list for toxicants. None of the 40 samples exceeded the Basin Plan criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33412, Sulfates	Region 9
Hodges, Lake	

LOE ID:	799
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from March 1997 to July 2001. None of the 18 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HG Rec Area Delivery Point.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33412, Sulfates	Region 9
Hodges, Lake	

LOE ID:	798
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. from March 1996 to June 2001. None of the 22 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected on a quarterly basis from March 1996 to June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	32602	Region 9
Hodges, Lake		

Pollutant:	Tetrachloroethylene/PCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32602, Tetrachloroethylene/PCE

Region 9

Hodges, Lake

LOE ID: 824

Pollutant: Tetrachloroethylene/PCE
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 46320

Region 9

Hodges, Lake

Pollutant: Toluene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46320, Toluene

Region 9

Hodges, Lake

LOE ID:	825
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32546

Region 9

Hodges, Lake

Pollutant:	Toxaphene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 14

samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32546, Toxaphene
Hodges, Lake**

Region 9

LOE ID:	849
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 03/1997 to 08/2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toxaphene is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	One to four samples were collected per year from 03/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33375
Hodges, Lake**

Region 9

Pollutant:	Trichloroethylene/TCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33375, Trichloroethylene/TCE
Hodges, Lake**

Region 9

LOE ID:	826
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33376
Hodges, Lake**

Region 9

Pollutant:	Trichlorofluoromethane (CFC-11)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33376, Trichlorofluoromethane (CFC-11)

Region 9

Hodges, Lake

LOE ID: 827

Pollutant: Trichlorofluoromethane (CFC-11)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 20

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichlorofluoromethane is 0.15 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Hodges Reservoir site HG Station A at the surface.

Temporal Representation: Samples were collected on a quarterly basis from January 1997 to August 2001.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID 33065

Region 9

Hodges, Lake

Pollutant:	Uranium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Basin Plan objective for Uranium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceeded the Basin Plan objective for Uranium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33065, Uranium Hodges, Lake

Region 9

LOE ID:	802
Pollutant:	Uranium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. in May, June, and October 1998. Three samples were collected. None were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all inland surface waters with a municipal beneficial use, the WQO for uranium is 20 pCi/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site HGA-0.
Temporal Representation: One sample per month was collected in May, June and October 1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33384	Region 9
Hodges, Lake		

Pollutant: Vinyl chloride
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33384, Vinyl chloride	Region 9
Hodges, Lake	

LOE ID: 828

Pollutant: Vinyl chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for vinyl chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33066		Region 9
Hodges, Lake		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 6 samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>	
Line of Evidence (LOE) for Decision ID 33066, Zinc		Region 9
Hodges, Lake		

LOE ID:	803
Pollutant:	Zinc

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. from January 1996 to March 1998. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected from January 1996 to March 1998. 1996 samples were collected quarterly. One sample each was collected in March 1997 and 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33385	Region 9
Hodges, Lake		

Pollutant:	cis-1,2-Dichloroethylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Hodges, Lake

LOE ID:	829
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33386

Region 9

Hodges, Lake

Pollutant:	meta-para xylenes
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33386, meta-para xylenes
Hodges, Lake**

Region 9

LOE ID:	830
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
Hodges, Lake**

32553

Region 9

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32553, o-Xylene
Hodges, Lake**

Region 9

LOE ID:	822
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from January 1997 to August 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Hodges Reservoir site HG Station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1997 to August 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 32735
Hodges, Lake**

Region 9

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2019

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 19 samples exceeded the Basin Plan criteria and all 5 years had samples which exceeded 0.05 mg/L more than 10% of the time. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32735, Manganese Hodges, Lake

Region 9

LOE ID:	790
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Department between January 1996 and September 2000. Nine of 19 samples were in exceedance. All 5 years had samples which exceeded 0.05 mg/L more than 10% of the time.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Hodges Lake is 0.05 milligrams/liter (mg/L) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected on a quarterly basis from January 1996 to September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Pollutant:	Mercury
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant.Four of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 14 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

LOE ID:	30998
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Fish were collected for tissue analysis at one location from Lake Hodges. A total of 13 sample composites were generated from two species: Largemouth Bass (11) and Common Carp (2). Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

Data Reference:	<p>of a Two-Year Screening Study" (SWAMP, 2009). A total of 3 out of 13 samples exceeded the OHHEA fish tissue screening value for human health.</p> <p>Data associated with report entitled: Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA</p> <p>Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA</p> <p>Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008</p>
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 0.3 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from one location in Lake Hodges. As discussed in the Lakes and Reservoirs Report (SWAMP, 2009), individual sample locations consisted of an area within a given waterbody with an approximate one-mile diameter, from which multiple fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody. Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008" (SWAMP, 2008).
Temporal Representation:	Samples were collected on August 28, 2007
Environmental Conditions:	There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in "Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG. 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 32549, Mercury

Region 9

Hodges, Lake

LOE ID:	791
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. on December 8, 1998. One sample was collected. It was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for mercury is 0.002mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	One sample was collected on December 8, 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33094	Region 9
Hodges, Lake		

Pollutant:	Turbidity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of the 20 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33094, Turbidity	Region 9
Hodges, Lake	

LOE ID:	801
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Department from March 1996 to December 2000. Eleven of 20 samples were in exceedance of the WQO for municipal beneficial uses.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters with all other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site HGA-0.
Temporal Representation:	Samples were collected on a quarterly basis from March 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33305	Region 9
Hodges, Lake		

Pollutant:	pH
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of the 20 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33305, pH	Region 9
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Hodges, Lake

LOE ID:	794
Pollutant:	pH (high)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site HGA-0 by the City of San Diego Water Dept. from March 1996 to December 2000. Fourteen of the 20 samples exceeded the maximum pH standard of 8.5.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data was collected at site HGA-0.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sutherland Reservoir](#)
Water Body ID: CAL9055300020010925095919
Water Body Type: Lake & Reservoir

DECISION ID	43643	Region 9
Sutherland Reservoir		

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the 14 samples exceeds the Basin Plan water quality objective for aluminum.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 14 samples exceeds the Basin Plan water quality objective for aluminum and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1 .
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43643, Aluminum	Region 9
Sutherland Reservoir	

LOE ID: 851

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at sample site SUA-0 by the City of San Diego Water Dept. from January 1996 to September 2000. One of 14 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 on the water's surface.
Temporal Representation:	Two to 4 samples per year were collected between January 1996 and September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43651	Region 9
Sutherland Reservoir		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources Source Unknown Unknown Nonpoint Source
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. All of the nine samples exceed the Basin Plan water quality objective for total nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All of the nine samples exceed the Basin Plan water quality objective for total nitrogen as N and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43651, Nitrogen	Region 9
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Sutherland Reservoir

LOE ID:	6180
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	City of San Diego, 2007a. Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at Sutherland Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however, some months were not sampled.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	

DECISION ID	43121	Region 9
Sutherland Reservoir		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the nine samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the nine samples exceed the Basin Plan water quality objective for phosphorus and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 43121, Phosphorus	Region 9
Sutherland Reservoir	

LOE ID:	6181
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	City of San Diego, 2007a. Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A Water Quality Control Plan for the San Diego Basin Goal of 0.025 mg/L for total phosphorus in any standing body of water. (RWQCB, 2007)
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at Sutherland Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however, some months were not sampled.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality

QAPP Information Reference(s):

DECISION ID	44395	Region 9
Sutherland Reservoir		

Pollutant:	Color
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Twenty-one of 21 samples exceed the Basin Plan water quality objective for color.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-one of 21 samples exceed the Basin Plan water quality objective for color and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44395, Color	Region 9
Sutherland Reservoir	

LOE ID:	858
Pollutant:	Color
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Twenty-one of 21 samples were in exceedance of the WQO for municipal waters.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for color is 15 units. For other beneficial uses, the WQO is 20 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 at the water surface.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44275	Region 9
Sutherland Reservoir		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan water quality objective for antimony.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Basin Plan water quality objective for antimony and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44275, Antimony	Region 9
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Sutherland Reservoir

LOE ID:	852
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. from September 1996 to June 2000. Four samples were collected, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 at the water's surface in the Sutherland Reservoir.
Temporal Representation:	Samples were collected between September 1996 and June 2000. One sample was collected in 1996, two in 1997 and one in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33009	Region 9
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Sutherland Reservoir

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 16 samples exceed the Basin Plan water quality objective for arsenic and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33009, Arsenic
Sutherland Reservoir**

Region 9

LOE ID:	853
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. None of the 16 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site SUA-0 at the surface in the Sutherland Reservoir.
Temporal Representation:	Samples were collected on a quarterly basis from January 1996 to September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33154
Sutherland Reservoir**

Region 9

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for barium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for barium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33154, Barium
Sutherland Reservoir**

Region 9

LOE ID:	854
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. from January 1996 to September 2000. Nineteen samples were collected, with no exceedances. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from site SUA-0 at the water surface.
Temporal Representation:	Samples were collected on a quarterly basis from January 1996 to September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33111

Region 9

Sutherland Reservoir

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan water quality objective for cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 2 samples exceed the Basin Plan water quality objective for cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33111, Cadmium

Region 9

Sutherland Reservoir

LOE ID:	855
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. on January 2, 1996 and June 3, 1996. Of 2 samples, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at site SUA-0 at the water's surface.

Temporal Representation:

One sample was collected on January 2, 1996 and one was collected on June 3, 1996.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	43727	Region 9
Sutherland Reservoir		

Pollutant: Chloride

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status

Original

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for chloride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 samples exceed the Basin Plan water quality objective for chloride and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43727, Chloride	Region 9
Sutherland Reservoir	

LOE ID: 856

Pollutant: Chloride

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Twenty-two samples were collected, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 at the water surface.
Temporal Representation:	Samples were collected on a quarterly basis from March 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33242	Region 9
Sutherland Reservoir		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the California Toxics Rule: freshwater chronic maximum (hardness dependent) water quality objective for chromium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the California Toxics Rule: freshwater chronic maximum (hardness dependent) water quality objective for chromium. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33242, Chromium**Region 9****Sutherland Reservoir**

LOE ID:	857
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between January 1996 and March 2000. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 at the water's surface.
Temporal Representation:	Samples were collected between January 1996 and March 2000. 2 samples were collected in 1996, two in 1997, one in 1999 and one in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**37862****Region 9****Sutherland Reservoir**

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan water quality objective for copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list</p>

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 8 samples exceed the Basin Plan water quality objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37862, Copper
Sutherland Reservoir**

Region 9

LOE ID:	859
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. from January 1996 to December 1998. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 at the water surface.
Temporal Representation:	Samples were collected between January 1996 and December 1998. There are four samples for 1996, one for 1997 and three for 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33234
Sutherland Reservoir**

Region 9

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for fluoride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for fluoride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33234, Fluoride
Sutherland Reservoir

Region 9

LOE ID: 860

Pollutant: Fluoride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data was collected at site SUA-0 by the City of San Diego Water Dept. between March 1996 and September 2000. None of the 19 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Fluoride is 2.4 mg/L when Annual Average of Maximum Daily Air Temperature = <53.8F, 2.2 mg/L when Annual Average of Maximum Daily Air Temperature = 53.8F-58.3F, 2.0 mg/L when Annual Average of Maximum Daily Air Temperature = 58.4F-63.8F, 1.8 mg/L when Annual Average of Maximum Daily Air Temperature = 63.9F-70.6F, 1.6 mg/L when Annual Average of Maximum Daily Air Temperature = 70.7F-79.2F, and 1.4 mg/L when Annual Average of Maximum Daily Air Temperature = 79.3F-90.5F. For inland surface water with all other beneficial uses the WQO for fluoride is 1.0 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site SUA-0 near the water surface.
Temporal Representation: Samples were collected on a quarterly basis from March 1996 to September 2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33051	Region 9
Sutherland Reservoir		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Basin Plan water quality objective for mercury.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Basin Plan water quality objective for mercury and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33051, Mercury	Region 9
Sutherland Reservoir	

LOE ID:	863
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. on March 8, 1999. One sample was collected. It was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for mercury is 0.002mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at site SUA-0 near the water's surface.
Temporal Representation:	The sample was collected on March 8, 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	37892	Region 9
Sutherland Reservoir		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan water quality objective for nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Basin Plan water quality objective for nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37892, Nickel
Sutherland Reservoir**

Region 9

LOE ID:	864
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. from December 1996 to March 2000. Four samples were collected, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the surface.
Temporal Representation:	Samples were collected between December 1996 and March 2000. There was one sample for each year, excluding 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33182
Sutherland Reservoir**

Region 9

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Basin Plan water quality objective for pentachlorophenol.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list</p>

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Basin Plan water quality objective for pentachlorophenol and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33182, Pentachlorophenol (PCP)
Sutherland Reservoir**

Region 9

LOE ID:	850
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. on December 1, 1997. One sample was collected. It was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for pentachlorophenol is 0.001mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data was collected at sample site SUA-0 in the Sutherland Reservoir. Sample was collected at the water's surface.
Temporal Representation:	The PCP sample comes from one sampling day, December 1, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 43623
Sutherland Reservoir**

Region 9

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or Pollution:

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan water quality objective for picloram.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Basin Plan water quality objective for picloram and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43623, Picloram
Sutherland Reservoir

Region 9

LOE ID:	866
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between December 1998 and June 2000. Three samples were collected, 0 were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at site SUA-0 near the water's surface.
Temporal Representation:	Samples were collected between December 1998 and June 2000. There was one sample for each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	37963	Region 9
Sutherland Reservoir		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 2 samples exceed the Basin Plan water quality objective for selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37963, Selenium	Region 9
Sutherland Reservoir	

LOE ID:	867
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. on March 3, 1997 and September 2, 1997. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the water surface.
Temporal Representation:	Samples were collected on March 3, 1997 and September 2, 1997. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43151	Region 9
Sutherland Reservoir		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 samples exceed the Basin Plan water quality objective for sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Sutherland Reservoir

LOE ID:	868
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. from March 1996 to December 2000. Twenty-two samples were collected. None were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the water's surface.
Temporal Representation:	Samples were collected on a quarterly basis from March 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33104

Region 9

Sutherland Reservoir

Pollutant:	Toluene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan water quality objective for toluene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Basin Plan water quality objective for toluene and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33104, Toluene

Region 9

Sutherland Reservoir

LOE ID:	870
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. on June 1, 1998, February 8, 1999, and May 3, 1999. Of the 3 samples, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the surface.
Temporal Representation:	One sample each was collected on June 1, 1998, February 8, 1999, and May 3, 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

44674

Region 9

Sutherland Reservoir

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 10 samples exceeds the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 10 samples exceeds the Basin Plan water quality objective for total dissolved solids and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 44674, Total Dissolved Solids Sutherland Reservoir

Region 9

LOE ID:	869
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between September 1998 and December 2000. One of 10 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the water surface.
Temporal Representation:	Samples were collected from September 1998 to December 2000. Two to 5 samples were collected each year.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	33105	Region 9
Sutherland Reservoir		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the 21 samples exceed the Basin Plan water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 21 samples exceed the Basin Plan water quality objective for turbidity and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33105, Turbidity	Region 9
Sutherland Reservoir	

LOE ID:	871
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at site SUA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Four of 21 samples were in exceedance of the WQO for a municipal beneficial use. (SWRCB, 2003).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For all other beneficial uses, the WQO is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the surface.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33118	Region 9
Sutherland Reservoir		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the Basin Plan objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 6 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.

Line of Evidence (LOE) for Decision ID 33118, Zinc	Region 9
Sutherland Reservoir	

LOE ID: 872

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between January 1996 and March 1999. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the surface.
Temporal Representation:	Samples were collected between January 1996 and March 1999. Four samples were collected in 1996, one in 1998, and one in 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44516	Region 9
Sutherland Reservoir		

Pollutant:	Iron
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 23 samples exceed the Basin Plan water quality objective for iron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 23 samples exceed the Basin Plan water quality objective for iron and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

The Regional Board staff incorrectly assessed iron as a conventional pollutant and applied table 3.2 of the listing Policy. Iron is a toxicant and should be assessed using Table 3.1 . State Water Board staff has corrected this error and revised the recommendation to List for iron. The revised recommendation is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 23 samples exceed the Basin Plan water quality objective for iron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 23 samples exceed the Basin Plan water quality objective for iron and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44516, Iron
Sutherland Reservoir**

Region 9

LOE ID:	861
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. from January 1996 to December 2000. One of 15 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site SUA-0 near the water surface.
Temporal Representation: Samples were collected between January 1996 and December 2000. There were 2-4 samples per year.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44516, Iron

Region 9

Sutherland Reservoir

LOE ID: 6179

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: City of San Diego, 2007a. Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006.
Data Reference: [Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, inland surface waters designated as domestic or municipal supply, shall not contain concentrations of iron in excess of the secondary maximum contaminant level 0.3 mg/L (RWQCB, 2007).
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: One surface water sample was collected per sampling event at Sutherland Reservoir at a standard location designated "Station A".
Temporal Representation: Samples were collected approximately once a month from January 2005 to December 2006; however, some months were not sampled.
Environmental Conditions:
QAPP Information: Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):

DECISION ID 33050

Region 9

Sutherland Reservoir

Pollutant: Manganese
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original

Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess the pollutant. Seven of 19 samples exceed the Basin Plan water quality objective for manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 19 samples exceed the Basin Plan water quality objective for manganese and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33050, Manganese
Sutherland Reservoir**

Region 9

LOE ID: 862

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 19
Number of Exceedances: 7

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data was collected at site SUA-0 by the City of San Diego Water Dept. from January 1996 to September 2000. Seven of 19 samples were in exceedance and the criteria was exceeded more than 10% of the time in all 5 years.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The water quality objective for manganese in Sutherland Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at site SUA-0 near the water's surface.
Temporal Representation:	Samples were collected on a quarterly basis between January 1996 and September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33064	Region 9
Sutherland Reservoir		

Pollutant:	pH
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Ten of 19 samples exceeded the Basin Plan water quality objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 19 samples exceeded the Basin Plan water quality objective for pH and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33064, pH	Region 9
Sutherland Reservoir	

LOE ID:	865
Pollutant:	pH (high)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19

Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site SUA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Ten of 19 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SUA-0 near the water surface.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Miramar Reservoir](#)
Water Body ID: CAL9061000020011005142514
Water Body Type: Lake & Reservoir

DECISION ID	43118	Region 9
Miramar Reservoir		

Pollutant: Nitrogen
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Other
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twenty-six of the 28 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-six of the 28 samples exceed the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, additional data and information are available indicating that standards are met.
5. Pursuant to section 6.1.5.3 of the listing policy, data from this Integrated Report cycle is not temporally representative of current conditions within these reservoirs, and thus insufficient information is available to support listing these reservoirs as impaired due to biostimulation from elevated nitrogen. In 2007, as a result of the reservoirs' imported source water, Dreissenid mussels ("quagga") were introduced, resulting drastic changes in reservoir ecosystems and management, including the drafting of management response plans in 2009. The impact of Dreissenid mussels on reservoir ecosystem dynamics, especially nutrient pools and cycling, is dramatic and well documented in the scientific literature. Impacts of Dreissenid mussel colonization can vary depending on reservoir dynamics, but typically results in the stripping of nutrients from the phytoplankton and promotion of macrophytes due to increased water clarity. Thus, data collected prior to Dreissenid introduction and management for listing purposes should be further considered as insufficient to make a decision determination.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43118, Nitrogen	Region 9
Miramar Reservoir	

LOE ID:	6162
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	26
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Data was collected by the City of San Diego for their Water Quality Monitoring for Drinking Source Water Reservoirs program. Sampling was monthly from January 2005 to December 2006.
Data Reference:	Twenty eight samples were collected with 26 exceeding the water quality objective. Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Miramar Reservoir at a standard location designated "Station AA".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory, Quality Assurance Manual

DECISION ID	33547	Region 9
Miramar Reservoir		

Pollutant:	1,1,1-Trichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33547, 1,1,1-Trichloroethane		Region 9
Miramar Reservoir		
LOE ID:	931	
Pollutant:	1,1,1-Trichloroethane	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	17	
Number of Exceedances:	0	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 17 samples were in exceedance.	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.	
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.	
Environmental Conditions:		
QAPP Information:	Data used in 2002 303(d) assessment.	
QAPP Information Reference(s):		

DECISION ID	33926	Region 9
Miramar Reservoir		
Pollutant:	1,1,2,2-Tetrachloroethane	

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33926, 1,1,2,2-Tetrachloroethane
Miramar Reservoir**

Region 9

LOE ID:	932
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33199	Region 9
Miramar Reservoir		

Pollutant: 1,1,2-Trichloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

 Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

 This conclusion is based on the staff findings that:
 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33199, 1,1,2-Trichloroethane	Region 9
Miramar Reservoir	

LOE ID: 933

Pollutant: 1,1,2-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34089	Region 9
Miramar Reservoir		

Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34089, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	Region 9
Miramar Reservoir	

LOE ID:	934
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 17 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference: 1,1-DCE is 0.006 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 at the surface.
 Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 05/2001.
 Environmental Conditions:
 QAPP Information: Data used in 2002 assessment.
 QAPP Information Reference(s):

DECISION ID	34035	Region 9
Miramar Reservoir		

Pollutant: 1,2,4-Trichlorobenzene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34035, 1,2,4-Trichlorobenzene	Region 9
Miramar Reservoir	

LOE ID: 935

Pollutant: 1,2,4-Trichlorobenzene
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the

Data Reference:	17 samples were in exceedance. Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	35101	Region 9
Miramar Reservoir		

Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 33 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 35101, 1,2-Dibromo-3-chloropropane (DBCP)	Region 9
Miramar Reservoir	

LOE ID:	937
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected from 1997 to 2001 by the City of San Diego Water Dept. None of the 16 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface water with a municipal beneficial use, the WQO for 1,2-Dibromo-3-chloropropane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 05/2001, except for 09/1999, in which no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35101, 1,2-Dibromo-3-chloropropane (DBCP)

Region 9

Miramar Reservoir

LOE ID:	936
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 17 samples were in exceedance. EPA Method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface water with a municipal beneficial use, the WQO for 1,2-Dibromo-3-chloropropane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33771

Region 9

Miramar Reservoir

Pollutant: 1,2-Dichloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33771, 1,2-Dichloroethane

Region 9

Miramar Reservoir

LOE ID: 939

Pollutant: 1,2-Dichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloroethane is 0.0005 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:

DECISION ID	33956	Region 9
Miramar Reservoir		

Pollutant: 1,2-Dichloroethylene,-trans
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33956, 1,2-Dichloroethylene,-trans	Region 9
Miramar Reservoir	

LOE ID: 954

Pollutant: 1,2-Dichloroethylene,-trans
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2-Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	34630	Region 9
Miramar Reservoir		

Pollutant: 1,2-Dichloropropane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34630, 1,2-Dichloropropane	Region 9
Miramar Reservoir	

LOE ID: 940

Pollutant: 1,2-Dichloropropane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloropropane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33650	Region 9
Miramar Reservoir		

Pollutant:	Alachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 25 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33650, Alachlor	Region 9
Miramar Reservoir	

LOE ID:	909
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 16 samples were in exceedance. Samples were analyzed using EPA method 525.2 (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33650, Alachlor

Region 9

Miramar Reservoir

LOE ID:	910
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 9 samples were in exceedance. EPA method 507 was used to analyze samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998. 1 sample was collected in 11/2000, and 1 on 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42337

Region 9

Miramar Reservoir

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42337, Aluminum

Region 9

Miramar Reservoir

LOE ID: 873

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 18
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 18 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation: Samples were collected on a quarterly basis from 01/02/1996 to 09/05/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	43107	Region 9
Miramar Reservoir		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An unknown number of the 23 samples exceed the water quality objective for ammonia. The wrong methodology was used to assess the data for the listing. The data will be re-assessed in the next listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. An unknown number of the 23 samples exceed the water quality objective for ammonia. The wrong methodology was used to assess the data for the listing.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43107, Ammonia	Region 9
Miramar Reservoir	

LOE ID: 6161
Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 23
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Samples were collected by the City of San Diego's Water Quality Monitoring for Drinking Source Water Reservoirs. January 2005 to December 2006.

Data Reference: A total of 23 samples were collected with 10 exceeding the water quality objective. The remaining 13 samples were reported as non-detects with a method detection limit of 0.031 mg/l and therefore not used in this line of evidence.
[Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	U.S. EPA, 1999 Update of Ambient Water Quality Criteria for Ammonia, EPA-822-R-99-014, December 1999.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Miramar Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

DECISION ID	33690	Region 9
Miramar Reservoir		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33690, Antimony	Region 9
Miramar Reservoir	

LOE ID:	874
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1998. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/02/1996 to 03/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32986	Region 9
Miramar Reservoir		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 19 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32986, Arsenic	Region 9
Miramar Reservoir	

LOE ID:	875
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 19 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir at site MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33651	Region 9
Miramar Reservoir		

Pollutant:	Atrazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 22 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33651, Atrazine	Region 9
Miramar Reservoir	

LOE ID:	911
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 13 samples were in exceedance. EPA method 525.2 was used for sample analysis (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 12/1998, and once per month in 03/2000, 06/2000, 09/2000, 03/2001, 06/2001, and 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33651, Atrazine

Region 9

Miramar Reservoir

LOE ID:	912
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 9 samples were in exceedance. EPA method 507 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998. 1 sample each was also collected in 11/2000, and 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34623	Region 9
Miramar Reservoir		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 19 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34623, Barium	Region 9
Miramar Reservoir	

LOE ID:	876
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 19 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected form 01/02/1996 to 09/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33707	Region 9
Miramar Reservoir		

Pollutant:	Benzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33707, Benzene	Region 9
Miramar Reservoir	

LOE ID:	942
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33017	Region 9
Miramar Reservoir		

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33017, Benzo(a)pyrene (3,4-Benzopyrene -7-d)		Region 9
Miramar Reservoir		

LOE ID:	913
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 17 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzo(a)pyrene is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 02/04/1997 to 07/10/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33878	Region 9
Miramar Reservoir		

Pollutant:	Carbofuran
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33878, Carbofuran	Region 9
Miramar Reservoir	

LOE ID:	955
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 07/2001, except for 12/1998 and 06/2000, during which no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	43060	Region 9
Miramar Reservoir		

Pollutant:	Carbon tetrachloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 43060, Carbon tetrachloride

Region 9

Miramar Reservoir

LOE ID:	943
Pollutant:	Carbon tetrachloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbon tetrachloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33544

Region 9

Miramar Reservoir

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 18 samples exceeded the Basin Plan criteria, and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33544, Chlordane

Region 9

Miramar Reservoir

LOE ID:	930
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 10 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Total Chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 03/1998 and once each in 08/1998, 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33544, Chlordane

Region 9

Miramar Reservoir

LOE ID:	929
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 8 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Total Chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Data were collected on a quarterly basis from 09/1997 to 12/1998, and once each in 06/2000 and 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43838	Region 9
Miramar Reservoir		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of 21 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43838, Chloride	Region 9
Miramar Reservoir	

LOE ID:	877
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 21 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/17/1996 to 12/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33335	Region 9
Miramar Reservoir		

Pollutant:	Chlorobenzene (mono)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33335, Chlorobenzene (mono)

Region 9

Miramar Reservoir

LOE ID: 944

Pollutant: Chlorobenzene (mono)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 st the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 32988

Region 9

Miramar Reservoir

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 32988, Chromium

Region 9

Miramar Reservoir

LOE ID:	878
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected 1-3 times per year from 01/02/1996 to 09/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33980

Region 9

Miramar Reservoir

Pollutant:	Color
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 255 samples exceeded the Basin Plan criteria, and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33980, Color

Region 9

Miramar Reservoir

LOE ID:	880
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 61 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA52.
Temporal Representation:	Samples were collected once in 07/1996, once in 10/1998, once per month from 01/1999 to 12/1999, and 2-4 times per month from 01/2000 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33980, Color

Region 9

Miramar Reservoir

LOE ID:	879
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 20 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/05/1996 to 12/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33980, Color

Region 9

Miramar Reservoir

LOE ID:	882
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 60 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA81.
Temporal Representation:	Samples were collected once each in 07/1996 and 10/1998, once monthly in 1999 (except for February and July), and 2-5 times monthly in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33980, Color

Region 9

Miramar Reservoir

LOE ID:	881
Pollutant:	Color

LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 61 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA66.
Temporal Representation:	Samples were collected once in 07/1996, once in 10/1998, once monthly in 1999 (except for February) and 2-5 times per month from 01/2000 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33980, Color

Region 9

Miramar Reservoir

LOE ID:	883
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1999 to 2000. None of the 53 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA96.
Temporal Representation:	Samples were collected 1-5 times monthly from 04/1999 to 11/2000, except for 11/1999.
Environmental Conditions:	

DECISION ID	33654	Region 9
Miramar Reservoir		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 28 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33654, Copper	Region 9
Miramar Reservoir	

LOE ID:	885
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-GA52.
Temporal Representation: One sample each was collected on 05/12/200 and 05/14/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33654, Copper

Region 9

Miramar Reservoir

LOE ID: 884

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 20 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir at site MMA-0.
Temporal Representation: Samples were collected on a quarterly basis from 01/02/1996 to 09/05/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33654, Copper

Region 9

Miramar Reservoir

LOE ID: 886

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 05/2000. None of the 2

Data Reference:	samples were in exceedance. Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA66.
Temporal Representation:	Samples were collected once each on 05/12/2000 and 05/14/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33654, Copper

Region 9

Miramar Reservoir

LOE ID:	888
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept in 05/2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA96.
Temporal Representation:	One sample each was collected on 05/12/2000 and 05/14/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33654, Copper

Region 9

Miramar Reservoir

LOE ID:	887
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 05/2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA81.
Temporal Representation:	Samples were collected once each on 05/12/2000 and 05/14/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33029	Region 9
Miramar Reservoir		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 31 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33029, Endrin	Region 9
Miramar Reservoir	

LOE ID:	914
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 16 samples were in exceedance. Samples were analyzed using EPA method 525.2.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33029, Endrin

Region 9

Miramar Reservoir

LOE ID:	915
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 05/2001 except for 05/2000 and 11/2000, during which months samples were not collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33937	Region 9
Miramar Reservoir		

Pollutant:	Ethylbenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33937, Ethylbenzene	Region 9
Miramar Reservoir	

LOE ID:	945
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33655	Region 9
Miramar Reservoir		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33655, Fluoride	Region 9
Miramar Reservoir	

LOE ID:	889
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 19 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/05/1996 to 09/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34034	Region 9
Miramar Reservoir		

Pollutant:	Glyphosate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34034, Glyphosate	Region 9
Miramar Reservoir	

LOE ID:	956
Pollutant:	Glyphosate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Glyphosate is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 07/2001, except for 09/1998 and 06/1999, during which months no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33021	Region 9
Miramar Reservoir		

Pollutant:	Heptachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 29 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33021, Heptachlor	Region 9
Miramar Reservoir	

LOE ID:	919
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 05/1999 and once each in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33021, Heptachlor

Region 9

Miramar Reservoir

LOE ID:	918
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 06/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33076	Region 9
Miramar Reservoir		

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 29 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33076, Heptachlor epoxide	Region 9
Miramar Reservoir	

LOE ID:	917
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 05/1999, and once each in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33076, Heptachlor epoxide
Miramar Reservoir

Region 9

LOE ID:	916
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. Samples were analyzed using EPA method 525.2.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 06/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 34099
Miramar Reservoir

Region 9

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 29 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 34099, Hexachlorobenzene/ HCB
Miramar Reservoir

Region 9

LOE ID:	920
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis (SWRCB, 2003) .
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 03/2000, and once each in 09/2000, 03/2001, 06/2001, and 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34099, Hexachlorobenzene/ HCB
Miramar Reservoir

Region 9

LOE ID:	921
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Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 504 or 505 was used in sample analysis (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 02/2000 and once each in 02/2001 and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34100	Region 9
Miramar Reservoir		

Pollutant:	Hexachlorocyclopentadiene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 30 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 34100, Hexachlorocyclopentadiene

Region 9

Miramar Reservoir

LOE ID:	922
Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34100, Hexachlorocyclopentadiene

Region 9

Miramar Reservoir

LOE ID:	923
Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference: Hexachlorocyclopentadiene is 0.05 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 03/1997 to 02/2000 and once each in 02/2001 and 05/2001.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33531	Region 9
Miramar Reservoir		

Pollutant: Iron
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33531, Iron	Region 9
Miramar Reservoir	

LOE ID: 890

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 11
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 11 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 07/16/1996 to 09/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	35100	Region 9
Miramar Reservoir		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 35100, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Miramar Reservoir	

LOE ID:	959
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1999 to 2001. None of the 7 samples were in exceedance.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 02/1999 to 02/2000 and once each in 02/2001 and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33750	Region 9
Miramar Reservoir		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 22 samples exceeded the Basin Plan criteria and one year had exceedances more than 10% of the time. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33750, Manganese		Region 9
Miramar Reservoir		

LOE ID:	891
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of the 22 samples was in exceedance. One year had samples which exceeded 0.05 mg/L more than 10% of the time.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Miramar Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected from 01/02/1996 to 09/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33617	Region 9
Miramar Reservoir		

Pollutant:	Methoxychlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 31 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33617, Methoxychlor	Region 9
Miramar Reservoir	

LOE ID:	924
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 16 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33617, Methoxychlor

Region 9

Miramar Reservoir

LOE ID:	925
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 15 samples were in exceedance. Samples were analyzed using EPA method 504 or 505.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.

Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 02/2000 and once each in 02/2001 and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34020	Region 9
Miramar Reservoir		

Pollutant:	Molinate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34020, Molinate	Region 9
Miramar Reservoir	

LOE ID:	958
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of 9 samples were in exceedance. EPA method 507 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Miramar Reservoir station MMA-0 at the surface.

Temporal Representation:

Samples were collected on a quarterly basis from 03/1997 to 08/1998. One sample each was collected in 11/2000 and 02/2001.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	33802	Region 9
Miramar Reservoir		

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 13 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33802, Nickel	Region 9
Miramar Reservoir	

LOE ID: 892

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 1999. None of the 13 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Miramar Reservoir site MMA-0.

Temporal Representation:

Samples were collected on a quarterly basis from 01/02/1996 to 06/08/1999.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID 34043 **Region 9**

Miramar Reservoir

Pollutant: Oxamyl (Vydate)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status

Original

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34043, Oxamyl (Vydate)

Region 9

Miramar Reservoir

LOE ID: 957

Pollutant: Oxamyl (Vydate)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Oxamyl is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 02/1997 to 07/2001, except for 12/1998 and 06/2000, during which months, no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33649	Region 9
Miramar Reservoir		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33649, PCBs (Polychlorinated biphenyls)	Region 9
Miramar Reservoir	

LOE ID:	908
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997. A total of 11 samples were collected. Eight different PCBs were sampled. No single PCB levels exceeded the standard, nor did the sum of the PCB measurements exceed the standard. Samples were analyzed using EPA method 525.2.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for PCBs is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on both 02/04/1997 and 05/06/1997 or just 05/06/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32982	Region 9
Miramar Reservoir		

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Water Quality Objective for Pentachlorophenol (PCP).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceeded the Basin plan Water Quality Objective for Pentachlorophenol (PCP) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Miramar Reservoir

LOE ID:	926
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 8 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 06/1998, and once each in 12/1998, 03/2000, and 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32887

Region 9

Miramar Reservoir

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 32887, Picloram

Region 9

Miramar Reservoir

LOE ID:	894
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 12/1998. One sample was collected, it was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation:	One sample was collected on 12/08/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

34038

Region 9

Miramar Reservoir

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 13 samples exceed the Basin Plan criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
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Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34038, Selenium
Miramar Reservoir**

Region 9

LOE ID:	895
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 13 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/02/1996 to 09/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33618
Miramar Reservoir**

Region 9

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33618, Simazine

Region 9

Miramar Reservoir

LOE ID:	927
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 12 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 02/1997 to 12/1998. Samples were also collected once each in 06/2000, 09/2000, 03/2001, and 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33618, Simazine

Region 9

Miramar Reservoir

LOE ID:	928
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 11/1999, and once each in 11/2000 and 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34039	Region 9
Miramar Reservoir		

Pollutant:	Sodium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34039, Sodium	Region 9
Miramar Reservoir	

LOE ID: 896

Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Sodium is 60%. This percent is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Percent sodium was calculated according to the Basin Plan, using measured sodium, magnesium, calcium and potassium concentrations.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation:	Percent Sodium was calculated using samples collected on a quarterly basis from 06/04/1996 to 09/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43034	Region 9
Miramar Reservoir		

Pollutant:	Styrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43034, Styrene

Region 9

Miramar Reservoir

LOE ID: 947

Pollutant: Styrene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

33533

Region 9

Miramar Reservoir

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the 21 samples exceed the Basin Plan Objective for Sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 21 samples exceeded the Basin Plan Objective for Sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33533, Sulfates

Region 9

Miramar Reservoir

LOE ID:	897
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Two of 21 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/17/1996 to 12/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33854

Region 9

Miramar Reservoir

Pollutant:	Tetrachloroethylene/PCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33854, Tetrachloroethylene/PCE

Region 9

Miramar Reservoir

LOE ID:	948
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33611

Region 9

Miramar Reservoir

Pollutant: Toluene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33611, Toluene

Region 9

Miramar Reservoir

LOE ID: 900

Pollutant: Toluene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. Samples were analyzed using EPA method 524.2.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:

QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33611, Toluene

Region 9

Miramar Reservoir

LOE ID: 899

Pollutant: Toluene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 02/1999. One sample was collected, it was not in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation: One sample was collected on 02/02/1999.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

33519

Region 9

Miramar Reservoir

Pollutant: Total Dissolved Solids
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Seven of 13 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
4. On October 25, 2006, the State Water Board decided that narrative standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33519, Total Dissolved Solids
Miramar Reservoir**

Region 9

LOE ID:	898
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 2001. Seven of the 13 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 09/01/1998 to 07/10/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 34021
Miramar Reservoir**

Region 9

Pollutant:	Toxaphene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the Basin Plan Objective for Toxaphene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 12 samples exceeded the Basin Plan Objective for Toxaphene and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34021, Toxaphene
Miramar Reservoir

Region 9

LOE ID:	960
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 12 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO forToxaphene is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.

Temporal Representation: Samples were collected on a quarterly basis from 03/1997 to 03/1998 and once each in 08/1998, 02/1999, 09/1999, 12/1999, 02/2000, 02/2001, and 05/2001.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	33914	Region 9
Miramar Reservoir		

Pollutant: Trichloroethylene/TCE

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33914, Trichloroethylene/TCE	Region 9
Miramar Reservoir	

LOE ID: 949

Pollutant: Trichloroethylene/TCE

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference: Trichloroethylene is 0.005 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33915	Region 9
Miramar Reservoir		

Pollutant: Trichlorofluoromethane (CFC-11)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33915, Trichlorofluoromethane (CFC-11)	Region 9
Miramar Reservoir	

LOE ID: 950

Pollutant: Trichlorofluoromethane (CFC-11)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the

Data Reference:	17 samples were in exceedance. Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichlorofluoromethane is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33612	Region 9
Miramar Reservoir		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 420 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33612, Turbidity	Region 9
Miramar Reservoir	

LOE ID:	905
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1999 to 2000. None of the 54 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA96.
Temporal Representation:	Samples were collected 1-5 times monthly from 04/1999 to 11/2000 (except for 11/1999).
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33612, Turbidity Miramar Reservoir

Region 9

LOE ID:	904
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	115
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 115 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA81.
Temporal Representation:	Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33612, Turbidity Miramar Reservoir

Region 9

LOE ID:	901
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 20 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/05/1996 to 12/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33612, Turbidity

Region 9

Miramar Reservoir

LOE ID:	902
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	116
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 116 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA52.
Temporal Representation:	Samples were collected 1-5 times monthly from 01/04/1996 to 12/12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33612, Turbidity

Region 9

Miramar Reservoir

LOE ID:	903
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	115
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 115 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-GA66.
Temporal Representation:	Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

34419

Region 9

Miramar Reservoir

Pollutant:	Uranium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Basin Plan objective for Uranium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceeded the Basin Plan objective for Uranium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34419, Uranium

Region 9

Miramar Reservoir

LOE ID:	906
Pollutant:	Uranium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Uranium is 20 pCi/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation:	Samples were collected once each in May, July and October 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33548

Region 9

Miramar Reservoir

Pollutant:	Vinyl chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan objectives, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33548, Vinyl chloride

Region 9

Miramar Reservoir

LOE ID:	951
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33613

Region 9

Miramar Reservoir

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 3 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33613, Zinc

Region 9

Miramar Reservoir

LOE ID:	907
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996 and 1997. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Miramar Reservoir station MMA-0.
Temporal Representation: Three samples were collected, one in 01/1996, one in 09/1996, and one in 09/1997.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33549	Region 9
Miramar Reservoir		

Pollutant: cis-1,2-Dichloroethylene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33549, cis-1,2-Dichloroethylene	Region 9
Miramar Reservoir	

LOE ID: 952

Pollutant: cis-1,2-Dichloroethylene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33639	Region 9
Miramar Reservoir		

Pollutant:	meta-para xylenes
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33639, meta-para xylenes	Region 9
Miramar Reservoir	

LOE ID:	953
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34025	Region 9
Miramar Reservoir		

Pollutant:	o-Dichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34025, o-Dichlorobenzene	Region 9
Miramar Reservoir	

LOE ID: 938

Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33853	Region 9
Miramar Reservoir		

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Miramar Reservoir

LOE ID:	946
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32987

Region 9

Miramar Reservoir

Pollutant:	p-Dichlorobenzene (DCB)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32987, p-Dichlorobenzene (DCB)

Region 9

Miramar Reservoir

LOE ID:	941
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir station MMA-0 at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33684

Region 9

Miramar Reservoir

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 33684, pH
Miramar Reservoir**

Region 9

LOE ID:	893
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 20 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Miramar Reservoir site MMA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/05/1996 to 12/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Murray Reservoir](#)
Water Body ID: CAL9071100020011005142858
Water Body Type: Lake & Reservoir

DECISION ID	42320	Region 9
Murray Reservoir		

Pollutant: Nitrogen
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Other
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twenty-two of the twenty eight samples exceed the Basin Plan water quality objective for total nitrogen as N.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of the twenty eight samples exceed the Basin Plan water quality objective for total nitrogen as N from 2005 to 2006 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, additional data and information are available indicating that standards are met.
5. Pursuant to section 6.1.5.3 of the listing policy, data from this Integrated Report cycle is not temporally representative of current conditions within these reservoirs, and thus insufficient information is available to support listing these reservoirs as impaired due to biostimulation from elevated nitrogen. In 2007, as a result of the reservoirs' imported source water, Dreissenid mussels ("quagga") were introduced, resulting drastic changes in reservoir ecosystems and management, including the drafting of management response plans in 2009. The impact of Dreissenid mussels on reservoir ecosystem dynamics, especially nutrient pools and cycling, is dramatic and well documented in the scientific literature. Impacts of Dreissenid mussel colonization can vary depending on reservoir dynamics, but typically results in the stripping of nutrients from the phytoplankton and promotion of macrophytes due to increased water clarity. Thus, data collected prior to Dreissenid introduction and management for listing purposes should be further considered as insufficient to make a decision determination.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42320, Nitrogen	Region 9
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Murray Reservoir

LOE ID:	6169
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	22
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Samples were collected by the City of San Diego's Water Quality Monitoring Data for their Drinking Source Water Reservoirs program. Sampling period was from January 2005 to December 2006.
Data Reference:	Twenty two of the 28 samples exceeded the water quality objective. Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Lake Murray Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

DECISION ID 33495

Region 9

Murray Reservoir

Pollutant:	pH
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Flaws in original listing

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Nine lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 88 samples exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of 88 samples exceeded the objective, and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID:	981
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 09/25/1997 and 01/29/1998. None of the 6 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray Watershed, drainage MURDS, station MUR5B.
Temporal Representation:	Samples were collected on 09/25/1997 at 12:58pm and on 01/29/1998 from 15:13-15:16pm.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID:	982
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. Three of 10 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray Watershed, drainage MURDS, station MUR7.
Temporal Representation:	Samples were collected on 03/12/1997 at 14:47 and 14:48pm and on 05/28/1997 at 8:41-8:48pm.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID:	983
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 09/1997 to 02/1998. Ten of 25 samples were in exceedance. The samples collected in 09/18/1997 and in 01/1998 were in exceedance, but those collected on all other days met standards.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected in Murray Watershed, drainage MURDS, station MUR8b.
Temporal Representation: Samples were collected on 09/18/1997 and 09/25/1997. Samples were also collected on 12/10/1997, 01/29/1998, and 02/04/1998.
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID: 984

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 1998. None of the 8 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir stations 2a and 2b.
Temporal Representation: Samples were collected on 01/29/1998 and on 02/04/1998. On each day, 3-5 samples were collected within 5 minutes.
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID: 976

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 18
Number of Exceedances: 1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 18 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 2-4 times per year from 03/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID:	977
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 09/1997. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray watershed, drainage MURDS, station MBP5.
Temporal Representation:	Samples were collected on 09/25/1997 at 13:41.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID:	978
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 05/1997. None of the 6 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray watershed, drainage MURDS, station MUR1A.
Temporal Representation:	Samples were collected on 05/28/1997 from 07:35am to 07:42am.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33495, pH

Region 9

Murray Reservoir

LOE ID:	979
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 09/1997. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Murray watershed, drainage MURDS, station MUR1B.
Temporal Representation:	Samples were collected on 09/26/1997 at 12:28pm.
Environmental Conditions:	
QAPP Information:	QA Info Missing

Line of Evidence (LOE) for Decision ID 33495, pH**Region 9****Murray Reservoir**

LOE ID:	980
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (maximum) to 8.5 (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray Watershed, drainage MURDS, station MUR4A.
Temporal Representation:	Samples were collected on 03/12/1997 at 13:54 and 13:55 and 05/28/1997 from 8:03am to 8:08am.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID**32589****Region 9****Murray Reservoir**

Pollutant:	1,1,1-Trichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,1,1-Trichloroethane .</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list</p>
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in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for 1,1,1-Trichloroethane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32589, 1,1,1-Trichloroethane

Region 9

Murray Reservoir

LOE ID:	1013
Pollutant:	1,1,1-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33632

Region 9

Murray Reservoir

Pollutant:	1,1,2,2-Tetrachloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,1,2,2-Tetrachloroethane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for 1,1,2,2-Tetrachloroethane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33632, 1,1,2,2-Tetrachloroethane

Region 9

Murray Reservoir

LOE ID:	1014
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33941	Region 9
Murray Reservoir		

Pollutant: 1,1,2-Trichloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

 This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

 One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,1,2-Trichloroethane.

 Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

 This conclusion is based on the staff findings that:
 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
 3. None of the 18 samples exceed the Basin Plan water quality objective for 1,1,2-Trichloroethane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33941, 1,1,2-Trichloroethane	Region 9
Murray Reservoir	

LOE ID: 1015

Pollutant: 1,1,2-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 18
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference: 1,1,2-Trichloroethane is 0.005 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	34019	Region 9
Murray Reservoir		

Pollutant: 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,1-Dichloroethylene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for 1,1-Dichloroethylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34019, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	Region 9
Murray Reservoir	

LOE ID: 1016

Pollutant: 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1.1-DCE is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44631	Region 9
Murray Reservoir		

Pollutant:	1,2,4-Trichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,2,4-Trichlorobenzene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for 1,2,4-Trichlorobenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Murray Reservoir

LOE ID:	1017
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

34082

Region 9

Murray Reservoir

Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 34 samples exceed the Basin Plan water quality objective for 1,2-Dibromo-3-chloropropane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 34 samples exceed the Basin Plan water quality objective for 1,2-Dibromo-3-chloropropane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34082, 1,2-Dibromo-3-chloropropane (DBCP)

Region 9

Murray Reservoir

LOE ID:	1019
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 16 samples were in exceedance. EPA methods 504 and/or 505 were used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dibromo-3-chloropropane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34082, 1,2-Dibromo-3-chloropropane (DBCP)

Region 9

Murray Reservoir

LOE ID:	1018
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. EPA method 524.2 was used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dibromo-3-chloropropane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43965	Region 9
Murray Reservoir		

Pollutant:	1,2-Dichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,2-Dichloroethane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for 1,2-Dichloroethane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Murray Reservoir

LOE ID:	1021
Pollutant:	1,2-Dichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloroethane is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33287

Region 9

Murray Reservoir

Pollutant:	1,2-Dichloroethylene,-trans
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for trans-1,2-Dichloroethylene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for trans-1,2-Dichloroethylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33287, 1,2-Dichloroethylene,-trans
Murray Reservoir**

Region 9

LOE ID:	1036
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2-Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33521
Murray Reservoir**

Region 9

Pollutant:	1,2-Dichloropropane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,2-Dichloropropane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for 1,2-Dichloropropane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33521, 1,2-Dichloropropane
Murray Reservoir**

Region 9

LOE ID:	1022
Pollutant:	1,2-Dichloropropane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloropropane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Pollutant:	Alachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 25 samples exceed the Basin Plan water quality objective for Alachlor.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 25 samples exceed the Basin Plan water quality objective for Alachlor and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33619, Alachlor

Region 9

Murray Reservoir

LOE ID:	1038
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 16 samples were in exceedance. Samples were analyzed using EPA method 525.2. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 05/02/1997 to 07/10/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33619, Alachlor

Region 9

Murray Reservoir

LOE ID: 1039

Pollutant: Alachlor
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. Samples were analyzed using EPA methods 507 and/or 531.1. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 03/1997 to 08/1998 and twice in 2000 (once in August and once in November).

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 32688

Region 9

Murray Reservoir

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan water quality objective for aluminum.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the Basin Plan water quality objective for aluminum and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32688, Aluminum
Murray Reservoir**

Region 9

LOE ID:	961
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 3-4 times per year from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 44560
Murray Reservoir**

Region 9

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An unknown number of the 10 samples exceed the water quality objective for ammonia as N. The wrong methodology was used to assess the data. The data will be assessed for exceedences of the water quality objective during the next listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 10 samples exceed the water quality objective for ammonia as N. The wrong methodology was used to assess the data.
4. Pursuant to section 4.11 of the Listing Policy, additional data and information are available indicating that standards are met.
5. Pursuant to section 6.1.5.3 of the listing policy, data from this Integrated Report cycle is not temporally representative of current conditions within these reservoirs, and thus insufficient information is available to support listing these reservoirs as impaired due to elevated nitrogen. In 2007, as a result of the reservoirs' imported source water, Dreissenid mussels ("quagga") were introduced, resulting drastic changes in reservoir ecosystems and management, including the drafting of management response plans in 2009. The impact of Dreissenid mussels on reservoir ecosystem dynamics, especially nutrient pools and cycling, is dramatic and well documented in the scientific literature. Impacts of Dreissenid mussel colonization can vary depending on reservoir dynamics, but typically results in the stripping of nutrients from the phytoplankton and promotion of macrophytes due to increased water clarity. Thus, data collected prior to Dreissenid introduction and management for listing purposes should be further considered as insufficient to make a decision determination.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 44560, Ammonia

Region 9

Murray Reservoir

LOE ID: 6167

Pollutant: Ammonia as Nitrogen

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 10

Number of Exceedances: 10

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: Samples were collected by the City of San Diego for their Water Quality Monitoring Data for Drinking Source Water Reservoirs report. Sampling period was from January 2005 to December 2006.

Data Reference:	A total of 23 samples were collected. Thirteen samples were recorded as non detects but the method detection limits were above the water quality objective. The remaining 10 samples were all above the objective. Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for un-ionized ammonia (NH3) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Murray Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

DECISION ID	32689	Region 9
Murray Reservoir		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the six samples exceed the Basin Plan water quality objective for antimony.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the six samples exceed the Basin Plan water quality objective for antimony and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 32689, Antimony

Region 9

Murray Reservoir

LOE ID:	962
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1997. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Three samples were collected per year from 01/1996 to 09/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42762

Region 9

Murray Reservoir

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan water quality objective for arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list</p>

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the Basin Plan water quality objective for arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42762, Arsenic

Region 9

Murray Reservoir

LOE ID:	963
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Two of the 4 samples were collected per year from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33799

Region 9

Murray Reservoir

Pollutant:	Atrazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 23 samples exceed the Basin Plan water quality objective for atrazine.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 23 samples exceed the Basin Plan water quality objective for atrazine and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 33799, Atrazine
Murray Reservoir**

Region 9

LOE ID:	1040
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of 14 samples were in exceedance. Samples were analyzed using EPA method 525.5. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/02/1997 to 07/10/2001, with the exception of 03/1999 and 12/1999 samples (which were not collected).

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33799, Atrazine
Murray Reservoir

Region 9

LOE ID: 1041

Pollutant: Atrazine
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. Analyses were conducted using EPA methods 507 and/or 531.1. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 03/1997 to 08/1998. One sample was collected in 08/2000, and one in 11/2000.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 32650
Murray Reservoir

Region 9

Pollutant: Barium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32650, Barium
Murray Reservoir**

Region 9

LOE ID:	964
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 17 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Two of 4 samples were collected per year from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33665
Murray Reservoir**

Region 9

Pollutant:	Benzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for benzene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for benzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33665, Benzene
Murray Reservoir

Region 9

LOE ID:	1024
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

DECISION ID	44561	Region 9
Murray Reservoir		

Pollutant: Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan water quality objective for benzo(a)pyrene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 14 samples exceed the Basin Plan water quality objective for benzo(a)pyrene and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44561, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	Region 9
Murray Reservoir	

LOE ID: 1042

Pollutant: Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzo(a)pyrene is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir at station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 02/04/1997 to 07/10/2001, except for 12/1999, 12/2000, and 03/2001 (in which months samples were not collected).
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33608	Region 9
Murray Reservoir		

Pollutant:	Carbofuran
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan water quality objective for carbofuran.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Basin Plan water quality objective for carbofuran and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33608, Carbofuran	Region 9
Murray Reservoir	

LOE ID: 1060

Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 07/2001, except for 08/1998, 11/1999, 08/2000, and 11/2000, for which months samples measurements were not reported.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33812	Region 9
Murray Reservoir		

Pollutant:	Carbon tetrachloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for carbon tetrachloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for carbon tetrachloride and

this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33812, Carbon tetrachloride

Region 9

Murray Reservoir

LOE ID:	1025
Pollutant:	Carbon tetrachloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbon Tetrachloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33607

Region 9

Murray Reservoir

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 20 samples exceed the Basin Plan water quality objective for chlordane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceed the Basin Plan water quality objective for chlordane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33607, Chlordane
Murray Reservoir**

Region 9

LOE ID:	1058
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. EPA method 525.2 was used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Total Chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected 2-4 times per year from 09/1997 to 12/2000. No samples were collected in 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33607, Chlordane
Murray Reservoir**

Region 9

LOE ID:	1059
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Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 11 samples were in exceedance. EPA methods 504 and/or 505 were used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Total Chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998. One sample each was collected in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32652	Region 9
Murray Reservoir		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 22 samples exceed the Basin Plan water quality objective for chloride and this sample

size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32652, Chloride

Region 9

Murray Reservoir

LOE ID:	965
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2001. None of the 22 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HA 907.11 with a municipal beneficial use, the WQO for chloride is 400 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 2-5 times per year from 03/1996 to 06/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 34065

Region 9

Murray Reservoir

Pollutant:	Chlorobenzene (mono)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for chlorobenzene (mono).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for chlorobenzene (mono) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34065, Chlorobenzene (mono)
Murray Reservoir**

Region 9

LOE ID:	1026
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the eight samples exceed the Basin Plan water quality objective for chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the eight samples exceed the Basin Plan water quality objective for chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

**Line of Evidence (LOE) for Decision ID 32881, Chromium
Murray Reservoir**

Region 9

LOE ID:	966
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected twice per year from 01/1996 to 09/2000. No samples were collected in 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32819	Region 9
Murray Reservoir		

Pollutant:	Color
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the 190 samples exceed the Basin Plan water quality objective for color.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 190 samples exceed the Basin Plan water quality objective for color and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32819, Color	Region 9
Murray Reservoir	

LOE ID:	967
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 17 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 2-4 times per year from 03/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32819, Color

Region 9

Murray Reservoir

LOE ID:	968
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 57 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-GA49.
Temporal Representation:	One to 2 samples per year were collected in 1996-1998. Five samples were collected in 1999, and samples were collected 3-4 times monthly for the entire year in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32819, Color

Region 9

Murray Reservoir

LOE ID:	969
Pollutant:	Color

LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 58 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-GA62.
Temporal Representation:	One to 2 samples per year were collected in 1996-1998. 5 samples were collected in 1999, and samples were collected 3-4 times monthly for the entire year in 2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32819, Color

Region 9

Murray Reservoir

LOE ID:	970
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 58 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-GA75.
Temporal Representation:	One to 2 samples per year were collected in 1996-1998. Five samples were collected in 1999, and samples were collected 3-4 times monthly for the entire year in 2000.

DECISION ID	32820	Region 9
Murray Reservoir		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 14 samples exceed the Basin Plan water quality objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 32820, Copper	Region 9
Murray Reservoir	

LOE ID:	971
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the

Data Reference:	14 samples were in exceedance. (SWRCB, 2003). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 1-4 times per year from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33610	Region 9
Murray Reservoir		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 28 samples exceed the Basin Plan water quality objective for endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 28 samples exceed the Basin Plan water quality objective for endrin and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33610, Endrin	Region 9
Murray Reservoir	

LOE ID: 1043

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/02/1997 to 07/10/2001, except for 03/2001, in which no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33610, Endrin

Region 9

Murray Reservoir

LOE ID:	1044
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 13 samples were in exceedance. EPA methods 504 and/or 505 were used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.

Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 02/1999. One sample each was collected in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34066	Region 9
Murray Reservoir		

Pollutant:	Ethylbenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for ethylbenzene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for ethylbenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 34066, Ethylbenzene	Region 9
Murray Reservoir	

LOE ID:	1027
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the

Data Reference: 18 samples were in exceedance. (SWRCB, 2003).
[Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir station A at the surface.

Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 08/2001.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	32703	Region 9
Murray Reservoir		

Pollutant: Fluoride

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Basin Plan water quality objective for flouride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceed the Basin Plan water quality objective for flouride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32703, Fluoride	Region 9
Murray Reservoir	

LOE ID: 972

Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 17 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Two to 4 samples were collected per year from 03/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32586	Region 9
Murray Reservoir		

Pollutant:	Glyphosate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for glyphosate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceed the Basin Plan water quality objective for glyphosate and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32586, Glyphosate

Region 9

Murray Reservoir

LOE ID:	1012
Pollutant:	Glyphosate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 16 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for glyphosate is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir, station A at the surface.
Temporal Representation:	Samples were collected 2-4 times per year (on a somewhat quarterly basis) from 03/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

43568

Region 9

Murray Reservoir

Pollutant:	Heptachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 27 samples exceed the Basin Plan water quality objective for Heptachlor.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 27 samples exceed the Basin Plan water quality objective for Heptachlor and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43568, Heptachlor
Murray Reservoir**

Region 9

LOE ID:	1048
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 13 samples were in exceedance. EPA methods 504 and/or 505 were used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 02/1999. One sample each was collected in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43568, Heptachlor
Murray Reservoir**

Region 9

LOE ID:	1047
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Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 03/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33625	Region 9
Murray Reservoir		

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 27 samples exceed the Basin Plan water quality objective heptachlor epoxide.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 27 samples exceed the Basin Plan water quality objective heptachlor epoxide and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33625, Heptachlor epoxide
Murray Reservoir**

Region 9

LOE ID:	1045
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 03/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33625, Heptachlor epoxide
Murray Reservoir**

Region 9

LOE ID:	1046
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the

	13 samples were in exceedance. EPA methods 504 and/or 505 were used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface. (SWRCB, 2003).
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 02/1999. One sample each was collected in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44034	Region 9
Murray Reservoir		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 28 samples exceed the Basin Plan water quality objective for hexachlorobenzene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 28 samples exceed the Basin Plan water quality objective for hexachlorobenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 44034, Hexachlorobenzene/ HCB	Region 9
Murray Reservoir	

LOE ID:	1049
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 525.2 was used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for 06/2000, in which no samples were reported.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44034, Hexachlorobenzene/ HCB

Region 9

Murray Reservoir

LOE ID:	1050
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 13 samples were in exceedance. EPA methods 504 and/or 505 were used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Murray Reservoir station A at the surface.

Temporal Representation:

Samples were collected on a quarterly basis from 03/1997 to 02/1999. One sample each was collected in 12/1999, 02/2000, 02/2001, and 05/2001.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	33876	Region 9
Murray Reservoir		

Pollutant: Hexachlorocyclopentadiene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 29 samples exceed the Basin Plan water quality objective for hexachlorocyclopentadiene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 29 samples exceed the Basin Plan water quality objective for hexachlorocyclopentadiene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33876, Hexachlorocyclopentadiene	Region 9
Murray Reservoir	

LOE ID: 1052

Pollutant: Hexachlorocyclopentadiene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 13 samples were in exceedance. EPA methods 504 and/or 505 were used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 02/1999. One sample each was collected in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33876, Hexachlorocyclopentadiene
Murray Reservoir

Region 9

LOE ID:	1051
Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 16 samples were in exceedance. EPA method 525.2 was used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42321

Region 9

Murray Reservoir

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 24 samples exceed the Basin Plan water quality objective for fresh water geomean density for E. coli and one of the 99 samples exceed the Basin Plan water quality objective for fresh water designated as a moderately or lightly used area, single sample maximum allowable density for E. coli.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 24 samples exceed the Basin Plan water quality objective for fresh water geomean density for E. coli and one of the 99 samples exceed the Basin Plan water quality objective for fresh water designated as a moderately or lightly used area, single sample maximum allowable density for E. coli and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42321, Indicator Bacteria Murray Reservoir

Region 9

LOE ID: 26989

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Samples were collected by the City of San Diego for their Water Quality Monitoring Data for Drinking Source Water Reservoirs. Samples were collected from January 2005 to December 2006.

Data Reference: Of the 24 geomeans, three exceeded the water quality objective.
[Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	In fresh water the geometric mean shall not exceed 126 per 100 mL. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Murray Reservoir at a standard location designated "Station AA".
Temporal Representation: Environmental Conditions:	Samples were collected once or twice a month from January 2005 to December 2006.
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

Line of Evidence (LOE) for Decision ID 42321, Indicator Bacteria

Region 9

Murray Reservoir

LOE ID:	6168
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	1
Data and Information Type: Data Used to Assess Water Quality:	Fixed station physical/chemical monitoring (conventional pollutants only) Samples were collected by the City of San Diego for their Water Quality Monitoring Data for Drinking Source Water Reservoirs. Samples were collected from January 2005 to December 2006.
Data Reference:	Of the 99 single samples collected, only one exceeded the water quality objective. Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	In fresh water designated as a moderately or lightly used area, the single sample maximum allowable density for E. coli is 406 per 100 mL. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Murray Reservoir at a standard location designated "Station AA".
Temporal Representation: Environmental Conditions:	Samples were collected once or twice a month from January 2005 to December 2006.
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 15 samples exceed the Basin Plan water quality objective for iron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 15 samples exceed the Basin Plan water quality objective for iron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32704, Iron	Region 9
Murray Reservoir	

LOE ID:	973
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of the 15 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Two of 4 samples were collected per year from 06/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33844	Region 9
Murray Reservoir		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the five samples exceed the Basin Plan water quality objective for lindane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the five samples exceed the Basin Plan water quality objective for lindane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33844, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Murray Reservoir	

LOE ID:	1063
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1999 to 2001. None of the 5 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected 2 times in 1999 (once in February and once in December), once in 02/2000, and twice in 2001 (once in February and once in May).
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43050	Region 9
Murray Reservoir		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 21 samples exceed the Basin Plan water quality objective for manganese.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceed the Basin Plan water quality objective for manganese and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43050, Manganese
Murray Reservoir**

Region 9

LOE ID:	974
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 21 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Murray Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Two to 7 samples were collected per year from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33666

Region 9

Murray Reservoir

Pollutant:	Methoxychlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 27 samples exceed the Basin Plan water quality objective for methoxychlor.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 27 samples exceed the Basin Plan water quality objective for methoxychlor and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33666, Methoxychlor
Murray Reservoir**

Region 9

LOE ID:	1053
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for 12/200 and 03/2001, in which months samples were not reported.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33666, Methoxychlor
Murray Reservoir**

Region 9

LOE ID:	1054
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 13 samples were in exceedance. EPA methods 504 and/or 505 were used in sample analysis. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 02/1999. One sample each was collected in 12/1999, 02/2000, 02/2001, and 05/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33823	Region 9
Murray Reservoir		

Pollutant:	Molinate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the nine samples exceed the Basin Plan water quality objective for molinate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the nine samples exceed the Basin Plan water quality objective for molinate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33823, Molinate

Region 9

Murray Reservoir

LOE ID:	1061
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected from 1997 to 2000. Samples were collected on a quarterly basis from 03/1997 to 08/1998, and once in 08/2000 and 11/2000. No samples were reported for 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32518

Region 9

Murray Reservoir

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 11 samples exceed the Basin Plan water quality objective for nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32518, Nickel
Murray Reservoir**

Region 9

LOE ID:	975
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1998. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 3-4 times per year from 01/1996 to 12/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 43339

Region 9

Murray Reservoir

Pollutant: Oxamyl (Vydate)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan water quality objective for oxamyl.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the Basin Plan water quality objective for oxamyl and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43339, Oxamyl (Vydate)

Region 9

Murray Reservoir

LOE ID: 1062

Pollutant: Oxamyl (Vydate)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Oxamyl is 0.2 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Temporal Representation:

Samples were collected at Murray Reservoir station A at the surface.

Samples were collected from 1997 to 2001. Samples were collected on a quarterly basis from 03/1997 to 06/1998. One sample each was also collected in 09/1998, 03/1999, 12/1999, 03/2000, and 09/2000. One sample was collected every 1-2 months from 12/2000 to 07/2001.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	42730	Region 9
Murray Reservoir		

Pollutant: Oxygen, Dissolved
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Nine of the 70 samples exceed the Basin Plan water quality objective for dissolved oxygen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 70 samples exceed the Basin Plan water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved	Region 9
Murray Reservoir	

LOE ID: 1009

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. None of the 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray Watershed, drainage MURDS, station MUR7.
Temporal Representation:	Samples were collected on 03/12/1997 at 14:47 and 14:48pm and 05/28/1997 from 8:41 to 8:48am.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved Murray Reservoir

Region 9

LOE ID:	1008
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 09/1997 and 01/1998. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray watershed at drainage MURDS, station MUR5b.
Temporal Representation:	Samples were collected on 09/25/1997 at 12:58 pm and on 01/29/1998 from 15:13to 15:16pm.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

QA Info Missing

**Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved
Murray Reservoir**

Region 9

LOE ID: 1007

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 9

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. Nine of 9 samples were in exceedance, 2 of 2 averages were in exceedance (when the average of the samples in each day is calculated). (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected in the Murray Watershed, drainage MURDS, station MUR4A.
Temporal Representation: Samples were collected on 03/12/1997 at 13:54 and 13:55 and on 05/28/1997 from 8:03am to 8:08am.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

QA Info Missing

**Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved
Murray Reservoir**

Region 9

LOE ID: 1006

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 09/1997. None of the 3 samples were in exceedance. (SWRCB, 2003).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray watershed, drainage MURDS, station MUR1A.
Temporal Representation:	Samples were collected on 09/25/1997 at 12:28 pm.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved Murray Reservoir

Region 9

LOE ID:	1004
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 09/1997. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray Watershed, drainage MURDS, station MBP5.
Temporal Representation:	Samples were collected on 09/25/1997 at 13:41.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved Murray Reservoir

Region 9

LOE ID:	1005
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Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 05/1997. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Watershed, drainage MURDS, station MUR1A.
Temporal Representation:	Samples were collected on 05/27/1997 from 07:35am to 07:42am.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved Murray Reservoir

Region 9

LOE ID:	1010
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 09/1997 to 02/1998. None of the 25 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected in Murray Watershed, drainage MURDS, station MUR8b.
Temporal Representation:	Samples were collected on 09/18/1997 from 12:50 to 13:46pm, on 09/25/1997 at 13:17 and 13:18pm, on 12/10/1997 from 11:48-11:57am, 01/08/1998 from 15:34 to 15:38pm, 01/29/1998 from 15:30 to 15:32 om, and 02/04/1998 from 15:25-15:28pm.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42730, Oxygen, Dissolved	Region 9
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Murray Reservoir

LOE ID:	1011
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected in 1998 by the City of San Diego Water Dept. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir sites 2a and 2b. (These sites are most likely within 200 m of each other).
Temporal Representation:	Samples were collected on 01/29/1998 (at 2b) and on 02/04/1998 (at 2a).
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 44413	Region 9
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Murray Reservoir

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 12 samples exceed the Basin Plan water quality objective for polychlorinated biphenyls.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 12 samples exceed the Basin Plan water quality objective for polychlorinated biphenyls and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44413, PCBs (Polychlorinated biphenyls)

Region 9

Murray Reservoir

LOE ID:	1037
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 1998. A total of 12 samples were collected for 9 different PCBs. No samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for PCBs is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	One to 2 samples were collected for each PCB. Samples were collected on 02/04/1997, 05/02/1997, and/or 12/02/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID		44344	Region 9
Murray Reservoir			
Pollutant:	Pentachlorophenol (PCP)		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)		
Revision Status	Original		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the eight samples exceed the Basin Plan water quality objective for pentachlorophenol.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the eight samples exceed the Basin Plan water quality objective for pentachlorophenol and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 		
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>		
Line of Evidence (LOE) for Decision ID 44344, Pentachlorophenol (PCP)			Region 9
Murray Reservoir			
LOE ID:	1055		
Pollutant:	Pentachlorophenol (PCP)		
LOE Subgroup:	Pollutant-Water		
Matrix:	Water		
Fraction:	Total		
Beneficial Use:	Municipal & Domestic Supply		
Number of Samples:	8		
Number of Exceedances:	0		
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING		
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 8 samples were in exceedance. (SWRCB, 2003).		
Data Reference:	Placeholder reference 2006 303(d)		
SWAMP Data:	Non-SWAMP		

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected 2-3 times per year in 1997, 1998 and 2000. Samples were collected in spring, summer, and winter months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	42501	Region 9
Murray Reservoir		

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Basin Plan water quality objective for picloram.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the Basin Plan water quality objective for picloram and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42501, Picloram		Region 9
Murray Reservoir		

LOE ID:	985
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 12/02/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	One sample was collected on 12/02/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43357	Region 9
Murray Reservoir		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the eight samples exceed the Basin Plan water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the eight samples exceed the Basin Plan water quality objective for selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43357, Selenium
Murray Reservoir**

Region 9

LOE ID:	986
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996 and 1997. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 4 times per year from 01/1996 to 12/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
Murray Reservoir**

34601

Region 9

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 21 samples exceed the Basin Plan water quality objective for simazine.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceed the Basin Plan water quality objective for simazine and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34601, Simazine

Region 9

Murray Reservoir

LOE ID:	1056
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 12 samples were in exceedance. Analysis was conducted using EPA method 525.2. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected 2-4 times per year from 02/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34601, Simazine

Region 9

Murray Reservoir

LOE ID:	1057
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. Sample analysis was conducted using EPA methods 507 and/or 531.1. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998. One sample was collected in 08/2000 and one in 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43554	Region 9
Murray Reservoir		

Pollutant:	Styrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for styrene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for styrene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43554, Styrene
Murray Reservoir**

Region 9

LOE ID: 1029

Pollutant: Styrene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 18
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

**DECISION ID 43078
Murray Reservoir**

Region 9

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 samples exceed the Basin Plan water quality objective for sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 12 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43078, Sulfates

Region 9

Murray Reservoir

LOE ID:	987
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2001. None of the 22 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in the 907.11 HA and all beneficial uses, the WQO for sulfate is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected 2-5 times per year from 03/1996 to 06/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID

44331

Region 9

Murray Reservoir

Pollutant:

Tetrachloroethylene/PCE

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for tetrachloroethylene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for tetrachloroethylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44331, Tetrachloroethylene/PCE
Murray Reservoir**

Region 9

LOE ID:	1030
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.

Temporal Representation:	Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34770	Region 9
Murray Reservoir		

Pollutant:	Toluene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for toluene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for toluene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 34770, Toluene	Region 9
Murray Reservoir	

LOE ID:	997
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 12/02/1997. One sample was collected, it was not in exceedance. (SWRCB, 2003).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	One sample was collected on 12/02/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessmnet.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34770, Toluene
Murray Reservoir

Region 9

LOE ID:	1031
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 asesment.
QAPP Information Reference(s):	

DECISION ID 33281
Murray Reservoir

Region 9

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Nine lines of evidence are available in the administrative record to assess this pollutant. Thirty-nine of the 64 samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-nine of the 64 samples exceed the Basin Plan water quality objective for total dissolved solids, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. At the October 25th, 2006 Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids
Murray Reservoir

Region 9

LOE ID:	991
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 09/1997. None of the 3 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected in the Murray watershed, drainage MURDS, station MUR1B.

Temporal Representation:

Samples were collected on 09/25/1997 at 12:28pm.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids

Region 9

Murray Reservoir

LOE ID: 990

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6

Number of Exceedances: 6

Data and Information Type:

PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:

Data were collected by the City of San Diego Water Dept. in 05/1997. Six of 6 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.

Data Reference:

[Placeholder reference 2006 303\(d\)](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Murray watershed, drainage MURDS, station MUR1A.

Temporal Representation:

Samples were collected on 05/28/1997 from 7:35am to 7:42am.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids

Region 9

Murray Reservoir

LOE ID: 995

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 09/1997 to 02/1998. Fourteen of 20 samples were in exceedance. Samples collected on 09/18/1997, 12/10/1997, and 02/04/1998 were in exceedance and those collected on other days were not. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray Watershed, drainage MURDS, station MUR8b.
Temporal Representation:	Samples were collected on 09/18/1997 from 12:50 to 13:46pm and on 09/25/1997 at 13:17 and 13:18pm. Samples were also collected 3-6 times within 10 minutes on 12/10/1997, 01/29/1998, and 02/04/1998.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids Murray Reservoir

Region 9

LOE ID:	994
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. Ten of 10 samples were in exceedance. Two of 2 averages were in exceedance (where averages were calculated for all samples collected each day. For 2 sampling days, 1 average was calculated for each day). At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is

500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected in the Murray watershed, drainage MURDS, station MUR7.

Temporal Representation:

Samples were collected on 03/12/1997 at 14:47 and 14:48pm and 05/28/1997 at 8:41-8:48am.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids

Region 9

Murray Reservoir

LOE ID: 993

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 09/1997 and 01/1998. None of the 6 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected in the Murray watershed, drainage MURDS, station MUR5B.

Temporal Representation:

Samples were collected on 09/25/1997 at 12:58 pm and 01/29/1998 at 15:13-15:16pm.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids

Region 9

Murray Reservoir

LOE ID: 992

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/1997 and 05/1997. Nine of 9 samples were in exceedance. Two of 2 averages were in exceedance (when averages are calculated for each the samples collected on each sampling day). At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the Murray Watershed, drainage MURDS, station MUR4A.
Temporal Representation:	Samples were collected on 03/12/1997 at 13:54 and 13:55 and on 05/28/1997 from 8:03am to 8:08am.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids

Region 9

Murray Reservoir

LOE ID:	988
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 2000. Three of 7 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is

500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Murray Reservoir site MUA-0.

Temporal Representation:

Samples were collected 1-4 times per year from 09/1998 to 12/2000.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids

Region 9

Murray Reservoir

LOE ID: 989

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type:

PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:

Data were collected by the City of San Diego Water Dept in 09/1997. None of the 3 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected in the Murray Watershed, MURDS drainage, station MBP5.

Temporal Representation:

Samples were collected on 09/25/1997 at 13:41.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33281, Total Dissolved Solids

Region 9

Murray Reservoir

LOE ID: 996

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998. Five of 8 samples (1 of 2 averages) were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir sites 2a and 2b.
Temporal Representation:	Samples were collected on 01/29/1998 and 02/04/1998 3-5 times within 5 minutes.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	42737	Region 9
Murray Reservoir		

Pollutant:	Toxaphene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for toxaphene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 11 samples exceed the Basin Plan water quality objective for toxaphene and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42737, Toxaphene

Region 9

Murray Reservoir

LOE ID:	1064
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toxaphene is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998. One sample was collected in 12/1999, 1 in 02/2000, and 2 in 2001 (one in February and one in May).
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33232

Region 9

Murray Reservoir

Pollutant:	Trichloroethylene/TCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for trichloroethylene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for trichloroethylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33232, Trichloroethylene/TCE

Region 9

Murray Reservoir

LOE ID:	1032
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

44054

Region 9

Murray Reservoir

Pollutant:	Trichlorofluoromethane (CFC-11)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for trichlorofluoromethane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for trichlorofluoromethane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44054, Trichlorofluoromethane (CFC-11)	Region 9
Murray Reservoir	

LOE ID:	1033
Pollutant:	Trichlorofluoromethane (CFC-11)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichlorofluoromethane is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation: Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33282	Region 9
Murray Reservoir		

Pollutant: Turbidity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the 385 samples exceed the Basin Plan water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 385 samples exceed the Basin Plan water quality objective for turbidity and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33282, Turbidity	Region 9
Murray Reservoir	

LOE ID: 999

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 122
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 122 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-GA49.
Temporal Representation:	Samples were collected from 01/1996 to 12/2000. Two to 5 samples were collected per month from 01/1996-12/1996. One sample was collected monthly in 1997 and 1998. One sample was collected per sampling month for 6 months in 1999. Two to 5 samples were collected per month from 01/2000 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33282, Turbidity

Region 9

Murray Reservoir

LOE ID:	1000
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 122 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-GA62.
Temporal Representation:	Samples were collected from 01/1996 to 12/2000. Two to 5 samples were collected per month from 01/1996-12/1996. One sample was collected monthly in 1997 and 1998. One sample was collected per sampling month for 6 months in 1999. Two to 5 samples were collected per month from 01/2000 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33282, Turbidity

Region 9

Murray Reservoir

LOE ID:	1001
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	123
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 123 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-GA75.
Temporal Representation:	Samples were collected from 01/1996 to 12/2000. Two to 5 samples were collected per month from 01/1996-12/1996. One sample was collected monthly in 1997 and 1998. One sample was collected per sampling month for 6 months in 1999. Two to 5 samples were collected per month from 01/2000 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33282, Turbidity

Region 9

Murray Reservoir

LOE ID:	998
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation: Samples were collected 2-4 times per year from 03/1996 to 12/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	43208	Region 9
Murray Reservoir		

Pollutant:	Uranium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Basin Plan objective for Uranium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceeded the Basin Plan objective for Uranium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 43208, Uranium	Region 9
Murray Reservoir	

LOE ID:	1002
Pollutant:	Uranium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Uranium is 20 pCi/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected once each in 1998 in April, July, and October.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33077	Region 9
Murray Reservoir		

Pollutant:	Vinyl chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for vinyl chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for vinyl chloride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Murray Reservoir

LOE ID:	1034
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32535

Region 9

Murray Reservoir

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Basin Plan objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32535, Zinc
Murray Reservoir**

Region 9

LOE ID:	1003
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir site MUA-0.
Temporal Representation:	Samples were collected once each in April, July, and October 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33852
Murray Reservoir**

Region 9

Pollutant:	meta-para xylenes
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for xylenes.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for xylenes and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33852, meta-para xylenes

Region 9

Murray Reservoir

LOE ID:	1035
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. No sums of isomers (where isomers were measured on the same day) were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/07/1997 to 08/07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34083	Region 9
Murray Reservoir		

Pollutant:	o-Dichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for o-dichlorobenzene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for o-dichlorobenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 34083, o-Dichlorobenzene	Region 9
Murray Reservoir	

LOE ID:	1020
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33602	Region 9
Murray Reservoir		

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for xylenes.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for xylenes and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33602, o-Xylene	Region 9
Murray Reservoir	

LOE ID:	1028
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 18 samples were in exceedance. There were no exceedances where isomer concentrations were summed (where samples for m, p, o-xylenes were collected on the same day). (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	42765	Region 9
Murray Reservoir		

Pollutant:	p-Dichlorobenzene (DCB)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for p-dichlorobenzene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for p-dichlorobenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42765, p-Dichlorobenzene (DCB)

Region 9

Murray Reservoir

LOE ID:	1023
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 18 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murray Reservoir station A at the surface.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 08/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Vicente Reservoir](#)
Water Body ID: CAL9072100020011025093029
Water Body Type: Lake & Reservoir

DECISION ID	42880	Region 9
San Vicente Reservoir		

Pollutant:	Color
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Other
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Seven-hundred-one of 1,841 samples exceed the Basin Plan water quality objective for color.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven-hundred-one of 1,841 samples exceed the Basin Plan water quality objective for color, and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 6.1.5.3 of the listing policy, data from this Integrated Report cycle is not temporally representative of current conditions within these reservoirs, and thus insufficient information is available to support listing these reservoirs as impaired due to color. In 2007, as a result of the reservoirs' imported source water, Dreissenid mussels ("quagga") were introduced, resulting drastic changes in reservoir ecosystems and management, including the drafting of management response plans in 2009. The impact of Dreissenid mussels on reservoir ecosystem dynamics, especially nutrient pools and cycling, is dramatic and well documented in the scientific literature. Impacts of Dreissenid mussel colonization can vary depending on reservoir dynamics, but typically results in the stripping of nutrients from the phytoplankton and promotion of macrophytes due to increased water clarity. Thus, data collected prior to Dreissenid introduction and management for listing purposes should be further considered as insufficient to make a decision determination.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1080
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	64
Number of Exceedances:	42
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Forty-two of 64 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA170.
Temporal Representation:	Three to 5 samples were collected monthly from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1081
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	236
Number of Exceedances:	130
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. There were 130 out of 236 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA50.
Temporal Representation:	One to 5 samples were collected monthly from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1082
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	92
Number of Exceedances:	36
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Thirty-six of 92 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA70.
Temporal Representation:	One to 5 samples were collected per month from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1079
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	109
Number of Exceedances:	68
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Sixty-eight of 109 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA160.
Temporal Representation:	Three to 5 samples were collected monthly from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1078
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	236
Number of Exceedances:	66
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Sixty-six of 236 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA140.
Temporal Representation:	One to 5 samples were collected monthly from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1073
Pollutant:	Color
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	189
Number of Exceedances:	75
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. There were 75 out of 189 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir at site SVA-0.
Temporal Representation:	Samples were collected from 01/02/1996 to 12/04/2000. Samples were collected on a monthly basis, with multiple samples being collected in some months.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1076
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	235
Number of Exceedances:	43
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Forty-three of 235 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA110.
Temporal Representation:	Four to 5 samples were collected per month, monthly from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1075
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	195
Number of Exceedances:	48
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Forty-eight of 195 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in San Vicente Reservoir site SVA-GA100.
Temporal Representation:	Samples were collected 4-5 times per month, monthly from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1074
Pollutant:	Color
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	74
Number of Exceedances:	48
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Forty-eight of 74 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA160.
Temporal Representation:	Multiple samples were collected per month, monthly from 01/29/1996 to 02/16/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1083
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	236
Number of Exceedances:	87
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. There were 87 out of 236 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA80.
Temporal Representation:	One to 5 samples were collected monthly from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42880, Color

Region 9

San Vicente Reservoir

LOE ID:	1077
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	175
Number of Exceedances:	58
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Fifty-eight of 175 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA130.
Temporal Representation:	Four to 5 samples were collected monthly from 01/1996 to 03/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	37158	Region 9
San Vicente Reservoir		
Pollutant:	Nitrogen	
Final Listing Decision:	Delist from 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Reason for Delisting:	Other	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Thirty-two of the 37 samples exceed the Basin Plan water quality objective for total nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-two of the 37 samples exceed the Basin Plan water quality objective for total nitrogen as N and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, additional data and information are available indicating that standards are met. 5. Pursuant to section 6.1.5.3 of the listing policy, data from this Integrated Report cycle is not temporally representative of current conditions within these reservoirs, and thus insufficient information is available to support listing these reservoirs as impaired due to biostimulation from elevated nitrogen. In 2007, as a result of the reservoirs' imported source water, Dreissenid mussels ("quagga") were introduced, resulting drastic changes in reservoir ecosystems and management, including the drafting of management response plans in 2009. The impact of Dreissenid mussels on reservoir ecosystem dynamics, especially nutrient pools and cycling, is dramatic and well documented in the scientific literature. Impacts of Dreissend mussel colonization can vary depending on reservoir dynamics, but typically results in the stripping of nutrients from the phytoplankton and promotion of macrophytes due to increased water clarity. Thus, data collected prior to Dreissenid introduction and management for listing purposes should be further considered as insufficient to make a decision determination. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 37158, Nitrogen**Region 9****San Vicente Reservoir**

LOE ID:	6173
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	32
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirty two of thirty seven samples exceed the water quality objective of 0.25 mg/L for total nitrogen according to results in Water Quality Monitoring Data for Drinking Water Reservoirs, San Diego January 2005 to December 2006. Samples were collected once or twice a month from January 2005 to December 2006.
Data Reference:	Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at San Vicente Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	

DECISION ID**43569****Region 9****San Vicente Reservoir**

Pollutant:	Ammonia
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. An unknown number of the 24 samples exceed the water quality objective for ammonia as N. The wrong methodology was used for the analysis of unionized ammonia data.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. An unknown number of the 24 samples exceed the water quality objective for un-ionized ammonia as N. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.</p> <p>The wrong methodology was used for the analysis of unionized ammonia data. The data will be re-assessed during the next listing cycle.</p>

Line of Evidence (LOE) for Decision ID 43569, Ammonia
San Vicente Reservoir

Region 9

LOE ID:	6174
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of twenty four samples exceed the water quality objective according to results in Water Quality Monitoring Data for Drinking Water Reservoirs, San Diego, January 2005 to December 2006. Samples were collected once or twice a month from January 2005 to December 2006.
Data Reference:	Water Quality Control Plan for the San Diego Basin
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for un-ionized ammonia (NH ₃) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

One surface water sample was collected per sampling event at San Vicente Reservoir at a standard location designated "Station AA".

Temporal Representation:

Samples were collected once or twice a month from January 2005 to December 2006.

Environmental Conditions:

QAPP Information:

Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.

QAPP Information Reference(s):

DECISION ID	33311	Region 9
San Vicente Reservoir		

Pollutant: Chromium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status

Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the nine samples exceed the California Toxic Rule water quality objective for chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of nine samples exceeded the CTR criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33311, Chromium	Region 9
San Vicente Reservoir	

LOE ID: 1072

Pollutant: Chromium (total)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 9 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for total chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir at site SVA-0.
Temporal Representation:	Samples were collected from 09/09/1996 to 09/06/2000. 1-3 samples were collected per year, with 0 samples being collected in 1997.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	43570	Region 9
San Vicente Reservoir		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Six of the 37 samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 37 samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, additional data and information are available indicating that standards are met.
5. Pursuant to section 6.1.5.3 of the listing policy, data from this Integrated Report cycle is not temporally representative of current conditions within these reservoirs, and thus insufficient information is available to support listing these reservoirs as impaired due to biostimulation from elevated nitrogen. In 2007, as a result of the reservoirs' imported source water, Dreissenid mussels ("quagga") were introduced, resulting drastic changes in reservoir ecosystems and management, including the drafting of management response plans in 2009. The impact of Dreissenid mussels on reservoir ecosystem dynamics, especially nutrient pools and cycling, is dramatic and well documented in the scientific literature. Impacts of Dreissenid mussel colonization can vary depending on reservoir dynamics, but typically results in the stripping of nutrients from the phytoplankton and promotion of macrophytes due to increased water clarity. Thus, data collected prior to Dreissenid introduction and management for

listing purposes should be further considered as insufficient to make a decision determination.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43570, Phosphorus

Region 9

San Vicente Reservoir

LOE ID:	6176
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Six of thirty seven samples exceed the water quality objective according to results in Water Quality Monitoring Data for Drinking Water Reservoirs, San Diego January 2005 to December 2006. Samples were collected once or twice a month from January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin Goal of 0.025 mg/L for total phosphorus in any standing body of water. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at San Vicente Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	

DECISION ID

32754

Region 9

San Vicente Reservoir

Pollutant:	Manganese
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original

**Reason for Delisting:
Impairment from Pollutant or
Pollution:**

Flaws in original listing
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Seven of 55 samples exceeded the Basin Plan water quality objective for manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 55 samples exceeded the Basin Plan water quality objective for manganese, and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32754, Manganese
San Vicente Reservoir**

Region 9

LOE ID: 1087

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 55
Number of Exceedances: 7

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Seven of 55 samples were in exceedance. Three of the 5 years had exceedances more than 10% of the time.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The water quality objective for manganese in San Vicente Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-0.

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Samples were collected on a monthly basis from 01/02/1996 to 09/06/2000.
QA Info Missing

DECISION ID	44566	Region 9
San Vicente Reservoir		

Pollutant: pH
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Reason for Delisting: Other
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twenty-eight of the 60 samples exceed the Basin Plan water quality objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-eight of the 60 samples exceed the Basin Plan water quality objective for pH and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 6.1.5.3 of the listing policy, data from this Integrated Report cycle is not temporally representative of current conditions within these reservoirs, and thus insufficient information is available to support listing these reservoirs as impaired due to pH. In 2007, as a result of the reservoirs' imported source water, Dreissenid mussels ("quagga") were introduced, resulting drastic changes in reservoir ecosystems and management, including the drafting of management response plans in 2009. The impact of Dreissenid mussels on reservoir ecosystem dynamics, especially nutrient pools and cycling, is dramatic and well documented in the scientific literature. Impacts of Dreissenid mussel colonization can vary depending on reservoir dynamics, but typically results in the stripping of nutrients from the phytoplankton and promotion of macrophytes due to increased water clarity. Thus, data collected prior to Dreissenid introduction and management for listing purposes should be further considered as insufficient to make a decision determination.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44566, pH	Region 9
San Vicente Reservoir	

LOE ID: 1091

Pollutant: pH (high)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	60
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Twenty-eight of 60 samples were in exceedance of the maximum standard.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected on a monthly basis from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	43170	Region 9
San Vicente Reservoir		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the 46 samples exceed the Basin Plan water quality objective for aluminum.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 46 samples exceed the Basin Plan water quality objective for aluminum, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43170, Aluminum	Region 9
San Vicente Reservoir	

LOE ID:	1066
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	46
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Two of 46 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected from 01/02/1996 to 11/06/2000 on a monthly-bimonthly basis.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	37221	Region 9
San Vicente Reservoir		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the nine samples exceed the California Toxics Rule water quality objective for antimony.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the nine samples exceed the California Toxics Rule water quality objective for antimony, and

this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37221, Antimony
San Vicente Reservoir**

Region 9

LOE ID:	1067
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 9 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all surface waters with a municipal beneficial use, the WQO for antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected from 06/03/1996 to 06/05/2000. One to 3 samples were collected per year.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**DECISION ID 37222
San Vicente Reservoir**

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 29 samples exceed the California Toxics Rule water quality objective for arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 29 samples exceed the California Toxics Rule water quality objective for arsenic, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37222, Arsenic
San Vicente Reservoir**

Region 9

LOE ID:	1068
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 29 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir at site SVA-0.
Temporal Representation:	Samples were collected from 01/02/1996 to 11/06/2000. Five to 7 samples were collected per year during different months.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 33309

Region 9

San Vicente Reservoir

Pollutant: Barium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 32 samples exceed the Basin Plan water quality objective for barium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 32 samples exceed the Basin Plan water quality objective for barium, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33309, Barium

Region 9

San Vicente Reservoir

LOE ID: 1069

Pollutant: Barium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 32
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996-2000. None of the 32 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at San Vicente Reservoir at site SVA-0.
Samples were collected from 01/02/1996 to 11/06/2000. Five to 9 samples were collected per year during separate months.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

QA Info Missing

DECISION ID	33310	Region 9
San Vicente Reservoir		

Pollutant: Benzene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the California Toxic Rule water quality objective for benzene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the two samples exceed the California Toxic Rule water quality objective for benzene, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33310, Benzene	Region 9
San Vicente Reservoir	

LOE ID: 1070

Pollutant: Benzene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	One sample per day was collected on 06/02/1997 and 08/07/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33486	Region 9
San Vicente Reservoir		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 28 samples exceed the California Toxics Rule water quality objective for copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 28 samples exceed the California Toxics Rule water quality objective for copper, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

San Vicente Reservoir

LOE ID:	1084
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 28 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected from 01/02/1996 to 09/06/2000. One to 10 samples were collected per year. For years except 1997, multiple months are represented.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

32600

Region 9

San Vicente Reservoir

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 59 samples exceed the Basin Plan water quality objective for fluoride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 59 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32600, Fluoride

Region 9

San Vicente Reservoir

LOE ID:	1085
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 59 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected on a monthly basis from 01/02/1996 to 11/06/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

43159

Region 9

San Vicente Reservoir

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan water quality objective for iron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 14 samples exceed the Basin Plan water quality objective for iron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 43159, Iron
San Vicente Reservoir**

Region 9

LOE ID:	1086
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected from 02/05/1996 to 12/04/2000. Multiple samples were collected per year.
Environmental Conditions:	
QAPP Information:	QA Info Missing

DECISION ID	36873	Region 9
San Vicente Reservoir		

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the Basin Plan water quality objective for nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the two samples exceed the Basin Plan water quality objective for nickel, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36873, Nickel	Region 9
San Vicente Reservoir	

LOE ID: 1089

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 1997 and 1999. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	One sample per day was collected on 12/01/1997 and 06/01/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	43714	Region 9
San Vicente Reservoir		

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of one sample exceed the California Toxics Rule water quality objective for Pentachlorophenol.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one sample exceed the California Toxics Rule water quality objective for Pentachlorophenol, and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43714, Pentachlorophenol (PCP)	Region 9
San Vicente Reservoir	

LOE ID:	1065
Pollutant:	Pentachlorophenol (PCP)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 03/06/2000. One sample was collected. It was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	One sample was collected on 03/06/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	32619	Region 9
San Vicente Reservoir		

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the Basin Plan water quality objective for Picloram.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Basin Plan water quality objective for Picloram, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32619, Picloram

Region 9

San Vicente Reservoir

LOE ID:	1092
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998 and 1999. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	One sample per day was collected on 12/07/1998 and 12/06/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

33658

Region 9

San Vicente Reservoir

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the eight

samples exceed the California Toxics Rule water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the eight samples exceed the California Toxic Rule water quality objective for selenium, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33658, Selenium

Region 9

San Vicente Reservoir

LOE ID:	1093
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected once per sampling day from 09/1996 to 11/2000. Sample measurements were reported for two events in 1996, 1 each in 1997 and 1998 and 4 events in 2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

34629

Region 9

San Vicente Reservoir

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample collected did not exceed the California Toxics Rule water quality objective for silver.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample collected did not exceed the California Toxics Rule water quality objective for silver and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34629, Silver San Vicente Reservoir

Region 9

LOE ID:	1094
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. 06/05/2000. The single sample collected was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Samples were collected at San Vicente Reservoir site SVA-0.
One sample was collected on 06/05/2000.

QA Info Missing

DECISION ID	37277	Region 9
San Vicente Reservoir		

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the Basin Plan water quality objective for simazine.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Neither of the two samples exceed the Basin Plan water quality objective for simazine, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 37277, Simazine	Region 9
San Vicente Reservoir	

LOE ID:	1095
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	One sample per day was collected on 02/03/1997 and 03/06/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33576	Region 9
San Vicente Reservoir		

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did exceed the Basin Plan water quality objective for thallium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A single sample was collected and it did exceed the Basin Plan water quality objective for thallium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33576, Thallium**Region 9****San Vicente Reservoir**

LOE ID:	1098
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 06/05/2000. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	One sample was collected on 06/05/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID**34012****Region 9****San Vicente Reservoir**

Pollutant:	Toluene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the four samples exceed the California Toxics Rule water quality objective for toluene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the four samples exceed the California Toxics Rule water quality objective for toluene, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34012, Toluene

Region 9

San Vicente Reservoir

LOE ID:	1099
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected once per year in 1996, 1997, 1999, and 2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

43578

Region 9

San Vicente Reservoir

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twenty-nine of 30 of the samples exceed the Basin Plan water quality objective for total dissolved solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-nine of 30 of the samples exceed the Basin Plan water quality objective for total dissolved solids, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. At the October 25, 2006 Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters (from other river basins) were higher than the MCLs. Narrative standards are therefore met.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43578, Total Dissolved Solids
San Vicente Reservoir**

Region 9

LOE ID:	1097
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 2000. Twenty-nine of 30 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in the San Vicente HA, with all beneficial uses, the WQO for TDS is 300 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation: Samples were collected monthly from 07/06/1998 to 12/04/2000.
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

DECISION ID	32692	Region 9
San Vicente Reservoir		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two-hundred-fifty-five of the 1874 samples exceed the Basin Plan water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two-hundred-fifty-five of the 1874 samples exceed the Basin Plan water quality objective for turbidity, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32692, Turbidity	Region 9
San Vicente Reservoir	

LOE ID:	1105
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	234

Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Five of 234 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA140.
Temporal Representation:	One to 4 samples were collected monthly from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1104
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	173
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Eleven of 173 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA130.
Temporal Representation:	Four to 5 samples were collected monthly from 01/1996 to 03/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1103
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Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	323
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Sixteen of 232 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA110.
Temporal Representation:	Four to 5 samples were collected monthly from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1102
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	193
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Thirty-five of 193 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA100.
Temporal Representation:	Samples were collected 4-5 times per month, monthly from 01/1996 to 09/2000.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

QA Info Missing

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID: 1101

Pollutant: Turbidity
LOE Subgroup: Pollutant-Sediment
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 52
Number of Exceedances: 2

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 1998. Two of 52 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at SVA-GA160.
Temporal Representation: Samples were collected multiple times per month, monthly from 01/1996 to 11/1998.
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID: 1109

Pollutant: Turbidity
LOE Subgroup: Pollutant-Sediment
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 69
Number of Exceedances: 16

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 1998. Sixteen of 69 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA70.
Temporal Representation:	One to 5 samples were collected per month from 01/1996 to 11/1998.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1108
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	232
Number of Exceedances:	97
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Ninety-seven of 232 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA50.
Temporal Representation:	One to 5 samples were collected monthly from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1106
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	108

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Two of 108 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA160.
Temporal Representation:	Three to 5 samples were collected monthly from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1107
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Three of 62 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA170.
Temporal Representation:	Three to 5 samples were collected monthly from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1110
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Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	234
Number of Exceedances:	64
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Sixty-four of 234 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-GA80.
Temporal Representation:	One to 5 samples were collected per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32692, Turbidity

Region 9

San Vicente Reservoir

LOE ID:	1100
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Sediment
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	194
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Four of 194 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected 4-5 times per month, monthly from 01/02/1996 to 12/04/2000.

DECISION ID	43692	Region 9
San Vicente Reservoir		

Pollutant:	Uranium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Basin Plan objective for Uranium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceeded the Basin Plan objective for Uranium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 43692, Uranium	Region 9
San Vicente Reservoir	

LOE ID:	1111
Pollutant:	Uranium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998. None of the 2 samples

Data Reference: [Placeholder reference 2006 303\(d\)](#) were in exceedance. (SWRCB, 2003).

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Uranium is 20 pCi/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Vicente Reservoir site SVA-0.

Temporal Representation: One sample per day was collected on 08/27/1998 and 10/05/1998.

Environmental Conditions:

QAPP Information: QA Info Missing

QAPP Information Reference(s):

DECISION ID	38025	Region 9
San Vicente Reservoir		

Pollutant: Zinc

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the Basin Plan objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 12 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38025, Zinc	Region 9
San Vicente Reservoir	

LOE ID: 1112

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 12 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected from 02/05/1996 to 03/06/2000. 3-5 samples were collected per year from 1996-1998. 0 samples were collected in 1999, and 1 sample was collected in 2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	41463	Region 9
San Vicente Reservoir		

Pollutant:	meta-para xylenes
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan water quality objective for meta-para xylenes.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Basin Plan water quality objective for meta-para xylenes and this

sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41463, meta-para xylenes

Region 9

San Vicente Reservoir

LOE ID:	1088
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 06/1997, 05/1999, and 08/2000. None of the 3 samples were in exceedance. The sum of all measured xylene concentrations (summed on days in which m, p, and o-xylenes were all measured) was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	None sample was collected per sampling day on 06/02/1997, 05/03/1999, and 08/07, 2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 43715

Region 9

San Vicente Reservoir

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan water quality objective for o-xylene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Basin Plan water quality objective for o-xylene and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 43715, o-Xylene
San Vicente Reservoir**

Region 9

LOE ID:	1090
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996-2000. None of the 4 samples were in exceedance. The sum of all measured xylenes (meta, para, ortho) on days in which all were measured, was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.

Temporal Representation: One sample per day was collected on 06/03/1996, 06/02/1997, 05/03/1999, and 08/07/2000.

Environmental Conditions:

QAPP Information: QA Info Missing

QAPP Information Reference(s):

DECISION ID	43115	Region 9
San Vicente Reservoir		

Pollutant: Chloride

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Sources: Source Unknown | Unknown Nonpoint Source | Water Diversions

Expected TMDL Completion Date: 2019

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Fifty-six of 60 samples exceed the Basin Plan water quality objective for chloride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-six of 60 samples exceed the Basin Plan water quality objective for chloride, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43115, Chloride	Region 9
San Vicente Reservoir	

LOE ID: 1071

Pollutant: Chloride

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 60

Number of Exceedances: 56

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Fifty-six of 60

Data Reference:	samples were in exceedance. Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in San Vicente HA and all beneficial uses, the WQO for Chloride is 50 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected on a monthly basis from 01/02/1996 to 12/04/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	44819	Region 9
San Vicente Reservoir		

Pollutant:	Sulfates
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Fifty-seven of 60 samples exceed the Basin Plan water quality objective for sulfates.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-seven of 60 samples exceed the Basin Plan water quality objective for sulfates, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44819, Sulfates	Region 9
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San Vicente Reservoir

LOE ID:	1096
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	57
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Fifty-seven of 60 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in the San Vicente HA and all beneficial uses, the WQO for sulfate is 65 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Vicente Reservoir site SVA-0.
Temporal Representation:	Samples were collected on a monthly basis from 01/02/1996 to 12/04/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [El Capitan Lake](#)
Water Body ID: CAL9073100020011025093211
Water Body Type: Lake & Reservoir

DECISION ID	34602	Region 9
El Capitan Lake		

Pollutant: 1,1,1-Trichloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34602, 1,1,1-Trichloroethane	Region 9
El Capitan Lake	

LOE ID: 1113

Pollutant: 1,1,1-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34689	Region 9
El Capitan Lake		

Pollutant:	1,1,2,2-Tetrachloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34689, 1,1,2,2-Tetrachloroethane	Region 9
El Capitan Lake	

LOE ID:	1114
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33882	Region 9
El Capitan Lake		

Pollutant:	1,1,2-Trichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33882, 1,1,2-Trichloroethane	Region 9
El Capitan Lake	

LOE ID:	1115
Pollutant:	1,1,2-Trichloroethane

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33657	Region 9
El Capitan Lake		

Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33657, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	Region 9
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El Capitan Lake

LOE ID:	1116
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 17 samples collected were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1-Dichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33532	Region 9
El Capitan Lake		

Pollutant:	1,2,4-Trichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33532, 1,2,4-Trichlorobenzene

Region 9

El Capitan Lake

LOE ID: 1117

Pollutant: 1,2,4-Trichlorobenzene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 33781

Region 9

El Capitan Lake

Pollutant: 1,2-Dibromo-3-chloropropane (DBCP)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 33 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33781, 1,2-Dibromo-3-chloropropane (DBCP)

Region 9

El Capitan Lake

LOE ID:	1118
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for DBCP is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33781, 1,2-Dibromo-3-chloropropane (DBCP)

Region 9

El Capitan Lake

LOE ID:	1119
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 16 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for DBCP is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 06/2001, with the exception of 09/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33653	Region 9
El Capitan Lake		

Pollutant:	1,2-Dichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.
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Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33653, 1,2-Dichloroethane	Region 9
El Capitan Lake	

LOE ID:	1121
Pollutant:	1,2-Dichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-dichloroethane is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33845	Region 9
El Capitan Lake		

Pollutant:	1,2-Dichloroethylene,-trans
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33845, 1,2-Dichloroethylene,-trans	Region 9
El Capitan Lake	

LOE ID:	1137
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2-dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34058	Region 9
El Capitan Lake		
Pollutant:	1,2-Dichloropropane	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>	

Line of Evidence (LOE) for Decision ID 34058, 1,2-Dichloropropane

Region 9

El Capitan Lake

LOE ID:	1122
Pollutant:	1,2-Dichloropropane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-dichloropropane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

34625

Region 9

El Capitan Lake

Pollutant:	Alachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 24 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34625, Alachlor
El Capitan Lake**

Region 9

LOE ID:	1140
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. EPA method 507 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998, and once each in 08/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 34625, Alachlor
El Capitan Lake**

Region 9

LOE ID:	1139
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the

15 samples were in exceedance. EPA method 525.2 was used for sample analysis.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected on a quarterly basis from 05/1997 to 06/2001, except for the year 1999, when only one sample was collected in 12/1999.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	33554	Region 9
El Capitan Lake		

Pollutant: Aluminum

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 51 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33554, Aluminum	Region 9
El Capitan Lake	

LOE ID: 1168

Pollutant: Aluminum

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on a monthly basis from 1996 to 2000. One of the 51 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected monthly from 01/1996 to 09/2000, with the exception of 01/1997, 01/1999, 04/1999, and 01/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34106	Region 9
El Capitan Lake		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does not satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 97 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34106, Antimony	Region 9
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El Capitan Lake

LOE ID:	1169
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	97
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1995 to 2005. Three of 97 samples were in exceedance (City of San Diego, 2006).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected several times per year from 04/12/95 to 11/9/05.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33838	Region 9
El Capitan Lake		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. One of the 27 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33838, Arsenic

Region 9

El Capitan Lake

LOE ID: 1170

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 27 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation: Samples were collected 4-7 times per year, during separate months, from 01/1996 to 11/2000.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

33163

Region 9

El Capitan Lake

Pollutant: Atrazine
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 23 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33163, Atrazine

Region 9

El Capitan Lake

LOE ID:	1141
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for in 1999 when no samples were reported.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33163, Atrazine

Region 9

El Capitan Lake

LOE ID:	1142
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. EPA method 507 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998 and and in 08/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33918	Region 9
El Capitan Lake		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 31 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33918, Barium	Region 9
El Capitan Lake	

LOE ID:	1171
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 31 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 5-9 times per year, during separate months, from 01/1996 to 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33645	Region 9
El Capitan Lake		

Pollutant:	Benzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33645, Benzene	Region 9
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El Capitan Lake

LOE ID:	1124
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2000. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	34626	Region 9
El Capitan Lake		

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

El Capitan Lake

LOE ID:	1143
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 525.2 was used in sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzo(a)pyrene is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 02/1997 to 12/2000, except for 1999, when 1 sample was collected that year in 12/1999, and in 06/2001 and 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32525

Region 9

El Capitan Lake

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used does not satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 87 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32525, Beryllium
El Capitan Lake**

Region 9

LOE ID:	1172
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	87
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1995 to 2005. Three of 87 samples were in exceedance (City of San Diego, 2006).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected once each in 12/4/95 to 9/11/05.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**DECISION ID 33599
El Capitan Lake**

Region 9

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33599, Cadmium

Region 9

El Capitan Lake

LOE ID:	1174
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. One sample was collected and was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in El Capitan Reservoir station ECA-0.
Temporal Representation:	One sample was collected in 05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33730

Region 9

El Capitan Lake

Pollutant:	Carbofuran
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the

2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33730, Carbofuran
El Capitan Lake**

Region 9

LOE ID:	1162
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. Samples were analyzed using either EPA method 531.1 or 547.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for 12/1998 and 06/2000, in which samples were not collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33646
El Capitan Lake

Region 9

Pollutant: Carbon tetrachloride

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33646, Carbon tetrachloride
El Capitan Lake**

Region 9

LOE ID: 1125

Pollutant: Carbon tetrachloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for carbon tetrachloride is 0.0005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33604, Chlordane	Region 9
El Capitan Lake	

LOE ID:	1161
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 11 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for total chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998, and once each in 12/1999, 02/2000, 02/2001, and 06/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33604, Chlordane El Capitan Lake

Region 9

LOE ID:	1160
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for total chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 09/1997 to 12/1998, and once each in 06/2000, 09/2000, and 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID El Capitan Lake

46163

Region 9

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of 59 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 59 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 46163, Chloride
El Capitan Lake**

Region 9

LOE ID:	1173
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Three of 59 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses in the El Capitan HA, the WQO for Chloride is 50 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected monthly from 01/1996 to 12/2000, with the exception of 01/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33598
El Capitan Lake**

Region 9

Pollutant:	Chlorobenzene (mono)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33598, Chlorobenzene (mono)
El Capitan Lake

Region 9

LOE ID:	1126
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for chlorobenzene(mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33600

Region 9

El Capitan Lake

Pollutant:	Chromium (total)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. One of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33600, Chromium (total)

Region 9

El Capitan Lake

LOE ID:	1175
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 17 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for total Chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 1-7 times per year from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

DECISION ID	33797	Region 9
El Capitan Lake		

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 33 samples exceeded the Basin Plan water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 33 samples exceeded the Basin Plan water quality objective for copper and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33797, Copper	Region 9
El Capitan Lake	

LOE ID: 1187

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 33
Number of Exceedances:

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 33 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected monthly in 1996, 1997 (except for 01/1997 and 12/1997), and 2000 (from January to July). Samples were collected 5 times in 1998 and 3 times in 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34627	Region 9
El Capitan Lake		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 29 samples exceed the Basin Plan water quality objective for endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 29 samples exceed the Basin Plan water quality objective for endrin and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 34627, Endrin		Region 9
El Capitan Lake		

LOE ID:	1145
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 15 samples were in exceedance. ECA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 06/2001, except for 05/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34627, Endrin

Region 9

El Capitan Lake

LOE ID:	1144
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for 1999, in which only one yearly sample was collected in 12/1997, and 2001, in which no samples were collected in 05/2001.
Environmental Conditions:	

DECISION ID	33938	Region 9
El Capitan Lake		

Pollutant: Ethylbenzene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Basin Plan water quality objective for ethylbenzene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceed the Basin Plan water quality objective for ethylbenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33938, Ethylbenzene	Region 9
El Capitan Lake	

LOE ID: 1127

Pollutant: Ethylbenzene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	33526	Region 9
El Capitan Lake		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 58 samples exceeded the Basin Plan water quality objective for flouride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 58 samples exceeded the Basin Plan water quality objective for flouride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33526, Fluoride	Region 9
El Capitan Lake	

LOE ID:	1188
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 58 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a monthly basis from 01/1996 to 11/2000, with the exception of 01/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33539	Region 9
El Capitan Lake		

Pollutant:	Glyphosate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Basin Plan water quality objective for glyphosate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceed the Basin Plan water quality objective for glyphosate and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33539, Glyphosate
El Capitan Lake**

Region 9

LOE ID:	1163
Pollutant:	Glyphosate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 531.1 or 547 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for glyphosate is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 07/2001, except for 09/1998 and 09/1999, in which no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 43605
El Capitan Lake**

Region 9

Pollutant:	Heptachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 28 samples exceeded the Basin Plan water quality objective for heptachlor.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 28 samples exceeded the Basin Plan water quality objective for heptachlor and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43605, Heptachlor
El Capitan Lake**

Region 9

LOE ID:	1148
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 06/2001, except for 12/1999, in which only one sample was collected for the year 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43605, Heptachlor
El Capitan Lake**

Region 9

LOE ID:	1149
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quartely basis from 03/1997 to 06/2001, with the exception of 09/1999, 05/2000, and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	34608	Region 9
El Capitan Lake		

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 28 samples from the two lines of evidence exceed the Basin Plan water quality objective for heptachlor epoxide.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 28 samples from the two lines of evidence exceed the Basin Plan water quality objective for heptachlor epoxide and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34608, Heptachlor epoxide
El Capitan Lake**

Region 9

LOE ID:	1147
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 06/2001, with the exception of 09/1999, 05/2000, and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 34608, Heptachlor epoxide
El Capitan Lake**

Region 9

LOE ID:	1146
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 06/2001, except for 1999, in which only one yearly sample was collected in 12/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43646	Region 9
El Capitan Lake		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 29 samples exceed the Basin Plan water quality objective for hexachlorobenzene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 29 samples exceed the Basin Plan water quality objective for hexachlorobenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43646, Hexachlorobenzene/ HCB	Region 9
El Capitan Lake	

LOE ID:	1150
Pollutant:	Hexachlorobenzene/ HCB

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for 12/1999, in which one year sample was collected, and in 06/2000, in which no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43646, Hexachlorobenzene/ HCB El Capitan Lake

Region 9

LOE ID:	1151
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 504 or 505 was used for sample exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 06/2001, with the exception of 05/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43394	Region 9
El Capitan Lake		

Pollutant:	Hexachlorocyclopentadiene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 30 samples from the two lines of evidence exceed the Basin Plan water quality objective for Hexachlorocyclopentadiene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 30 samples from the two lines of evidence exceed the Basin Plan water quality objective for Hexachlorocyclopentadiene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 43394, Hexachlorocyclopentadiene	Region 9
El Capitan Lake	

LOE ID:	1152
Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of 15 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface water with a municipal beneficial use, the WQO for hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 07/2001, except for 12/1999, in which only one yearly sample was collected for 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43394, Hexachlorocyclopentadiene
El Capitan Lake**

Region 9

LOE ID:	1153
Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of 15 samples were in exceedance. EPA method 504 or 505 was used in sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface water with a municipal beneficial use, the WQO for hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 06/2001, except for 05/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 34795
El Capitan Lake**

Region 9

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 37 samples exceeds the Basin Plan water quality objective for iron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 37 samples exceeds the Basin Plan water quality objective for iron and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34795, Iron El Capitan Lake

Region 9

LOE ID:	1189
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 37 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 3-10 times per year from 01/1996 to 07/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33652	Region 9
El Capitan Lake		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollutant

Pollution:

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan water quality objective for lindane/gamma hexachlorocyclohexane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan water quality objective for lindane/gamma hexachlorocyclohexane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33652, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
El Capitan Lake	

LOE ID: 1166

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1999 to 2001. None of the 7 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 02/1999 to 02/2000, and in 02/2001 and 06/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43192	Region 9
El Capitan Lake		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan water quality objective for mercury.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A single sample was collected and it did not exceed the Basin Plan water quality objective for mercury and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43192, Mercury	Region 9
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El Capitan Lake

LOE ID:	1191
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. One sample was collected and was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	One sample was collected on 04/05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33534

Region 9

El Capitan Lake

Pollutant:	Methoxychlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 29 samples exceed the Basin Plan water quality objective for methoxychlor.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 29 samples exceed the Basin Plan water quality objective for methoxychlor and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33534, Methoxychlor

Region 9

El Capitan Lake

LOE ID:	1155
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 15 samples were in exceedance. EPA method 504 or 505 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 05/1997 to 06/2001, except for 02/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33534, Methoxychlor

Region 9

El Capitan Lake

LOE ID:	1154
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 14 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 1-4 times per year from 05/1997 to 07/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43613	Region 9
El Capitan Lake		

Pollutant:	Molinate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan water quality objective for molinate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 9 samples exceed the Basin Plan water quality objective for molinate and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43613, Molinate	Region 9
El Capitan Lake	

LOE ID:	1165
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Tissue
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 9 samples were in exceedance. EPA method 507 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998 and in 08/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46329	Region 9
El Capitan Lake		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan water quality objective for nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Basin Plan water quality objective for nickel and this does not

exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46329, Nickel

Region 9

El Capitan Lake

LOE ID:	1192
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2000. None of the 5 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected once each in 12/1996, 12/1997, 06/1999, 09/1999, and 05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33697

Region 9

El Capitan Lake

Pollutant:	Odor threshold number
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.
	This pollutant is being considered for placement on the section 303(d) list under section 3.7 of the Listing Policy. Under section 3.7 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of four samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of four samples exceed the water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33697, Odor threshold number
El Capitan Lake**

Region 9

LOE ID:	1215
Pollutant:	Odor threshold number
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996. One of 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Odor is 3 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA177.
Temporal Representation:	Samples were collected once each on 4 days in January 1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33320
El Capitan Lake**

Region 9

Pollutant: Oxamyl (Vydate)

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceeded the Basin Plan water quality objective for Oxamyl (Vydate).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan water quality objective for Oxamyl (Vydate) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33320, Oxamyl (Vydate)
El Capitan Lake

Region 9

LOE ID:	1164
Pollutant:	Oxamyl (Vydate)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 531.1 or 547 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for oxamyl is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 07/2001, except for 12/1998 and 06/2000, in which no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43749	Region 9
El Capitan Lake		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 13 samples exceed the Basin Plan water quality objective for polychlorinated biphenyls.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 13 samples exceed the Basin Plan water quality objective for polychlorinated biphenyls and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43749, PCBs (Polychlorinated biphenyls)	Region 9
El Capitan Lake	

LOE ID:	1138
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997. None of the 13 samples were in exceedance. Samples were collected for 8 PCBs. Neither a single PCB, nor the sum of the PCBs were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Polychlorinated Biphenyls is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected either on both 02/05/1997 and 05/07/1997, or on just 05/07/1997. One sample was collected each sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33603	Region 9
El Capitan Lake		

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 10 samples exceed the Basin Plan water quality objective for Pentachlorophenol.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Basin Plan water quality objective for Pentachlorophenol and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33603, Pentachlorophenol (PCP)	Region 9
El Capitan Lake	

LOE ID:	1157
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998. One sample was collected and was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	One sample was collected on 03/04/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33603, Pentachlorophenol (PCP)
El Capitan Lake

Region 9

LOE ID:	1156
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2000. None of the 9 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 02/1997 to 06/1998, and twice per year in 1998 and 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32560	Region 9
El Capitan Lake		

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan water quality objective for picloram.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Basin Plan water quality objective for picloram and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32560, Picloram	Region 9
El Capitan Lake	

LOE ID:	1194
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 1999. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected once each in 12/1998, 09/1999, and 12/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43537	Region 9
El Capitan Lake		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 9 samples exceeded the Basin Plan water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 9 samples exceed the Basin Plan water quality objective for selenium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43537, Selenium	Region 9
El Capitan Lake	

LOE ID: 1195

Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 9 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 1-4 times per year from 01/1996 to 05/2000, except for 1999, in which no samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43091	Region 9
El Capitan Lake		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan water quality objective for silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A single sample was collected and it did not exceed the Basin Plan water quality objective for silver and this sample size is insufficient to determine with the power and confidence of the Listing Policy if

standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43091, Silver

Region 9

El Capitan Lake

LOE ID:	1196
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. One sample was collected and was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	One sample was collected in 05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

43037

Region 9

El Capitan Lake

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 21 samples exceed the Basin Plan water quality objective for simazine.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceed the Basin Plan water quality objective for simazine and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43037, Simazine
El Capitan Lake**

Region 9

LOE ID:	1158
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1997 to 2001. None of the 12 samples were in exceedance. EPA method 525.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 02/1997 to 12/1998, and twice per year in 2000 and 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43037, Simazine
El Capitan Lake**

Region 9

LOE ID:	1159
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Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 2000. None of the 9 samples were in exceedance. EPA method 507 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1997 to 08/1998 and in 08/2000 and 11/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	42872	Region 9
El Capitan Lake		

Pollutant:	Styrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 17 samples exceeded the Basin Plan water quality objective for styrene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan water quality objective for styrene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 42872, Styrene
El Capitan Lake**

Region 9

LOE ID:	1129
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 32353
El Capitan Lake**

Region 9

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 59

samples exceed the Basin Plan water quality objective for sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 59 samples exceed the Basin Plan water quality objective for sulfates and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32353, Sulfates
El Capitan Lake**

Region 9

LOE ID:	1197
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of 59 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses in the El Capitan HA, the WQO for sulfate is 65 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a monthly basis from 01/1996 to 12/2000, with the exception of 01/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33866
El Capitan Lake**

Region 9

Pollutant: Tetrachloroethylene/PCE

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Basin Plan water quality objective for tetrachloroethylene (PCE).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceed the Basin Plan water quality objective for tetrachloroethylene (PCE) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33866, Tetrachloroethylene/PCE
El Capitan Lake

Region 9

LOE ID:	1130
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44006	Region 9
El Capitan Lake		

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it exceeded the Basin Plan water quality objective for thallium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A single sample was collected and it exceeded the Basin Plan water quality objective for thallium and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 44006, Thallium	Region 9
El Capitan Lake	

LOE ID:	1199
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. One sample was collected and was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	One sample was collected on 05/03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43972	Region 9
El Capitan Lake		

Pollutant:	Toluene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Basin Plan water quality objective for toluene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceed the Basin Plan water quality objective for toluene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43972, Toluene	Region 9
El Capitan Lake	

LOE ID: 1131

Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32438	Region 9
El Capitan Lake		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of 30 samples exceeded the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 30 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board

concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32438, Total Dissolved Solids

Region 9

El Capitan Lake

LOE ID:	1198
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 2000. Seven of 30 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 300 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected monthly from 07/1998 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33791

Region 9

El Capitan Lake

Pollutant:	Total Suspended Solids (TSS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.
	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.
	<p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. All 7 samples from two lines of evidence showed measurable values but there is no quantitative evaluation guideline with which to measure these values so it cannot be determined whether or not standards are being exceeded.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33791, Total Suspended Solids (TSS)**Region 9****El Capitan Lake**

LOE ID:	1213
Pollutant:	Total Suspended Solids (TSS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996. Three samples were collected, with measurable concentrations between 5.7 and 6.1 mg/L.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, for Solids, Suspended and Settleable, waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECB-0.
Temporal Representation:	Samples were collected once in 02/1996 and twice in 03/1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33791, Total Suspended Solids (TSS)**Region 9****El Capitan Lake**

LOE ID: 1214

Pollutant: Total Suspended Solids (TSS)
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 1996. All 4 samples showed measurable values, which ranged from 1.3 to 7.0 mg/L.
 Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, for Solids, Suspended and Settleable, waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
 Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at El Capitan Reservoir station ECC-0.
 Temporal Representation: Two samples were collected in 02/1996 and 2 were collected in 03/1996.
 Environmental Conditions:
 QAPP Information: Data used in 2002 assessment. QA=?
 QAPP Information Reference(s):

DECISION ID	33673	Region 9
El Capitan Lake		

Pollutant: Toxaphene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 13 samples exceed the Basin Plan water quality objective for toxaphene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 13 samples exceed the Basin Plan water quality objective for toxaphene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33673, Toxaphene

Region 9

El Capitan Lake

LOE ID: 1167

Pollutant: Toxaphene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 13 samples were in exceedance. EPA method 504 or 505 was used in sample analysis.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Total Toxaphene is 0.003 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation: Samples were collected 1-4 times per year from 03/1997 to 06/2001.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 43426

Region 9

El Capitan Lake

Pollutant: Trichloroethylene/TCE
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Basin Plan water quality objective for Trichloroethylene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceed the Basin Plan water quality objective for Trichloroethylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43426, Trichloroethylene/TCE

Region 9

El Capitan Lake

LOE ID:	1132
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33687

Region 9

El Capitan Lake

Pollutant:	Trichlorofluoromethane (CFC-11)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Basin Plan water quality objective for trichlorofluoromethane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceed the Basin Plan water quality objective for trichlorofluoromethane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33687, Trichlorofluoromethane (CFC-11)

Region 9

El Capitan Lake

LOE ID:	1133
Pollutant:	Trichlorofluoromethane (CFC-11)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichlorofluoromethane is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33215	Region 9
El Capitan Lake		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Of the 1726 samples, 135 exceed the Basin Plan water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Of the 1726 samples, 135 exceed the Basin Plan water quality objective for turbidity and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33215, Turbidity	Region 9
El Capitan Lake	

LOE ID:	1201
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	161
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Nineteen of 161 samples were in exceedance of 5 ntu. No samples exceeded 20 ntu.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA102.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity El Capitan Lake

Region 9

LOE ID:	1206
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1998. None of the 62 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA157.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 10/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity El Capitan Lake

Region 9

LOE ID:	1203
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Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	135
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Eight of 135 samples were in exceedance of 5 ntu. No samples exceeded 20 ntu.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA127.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity

Region 9

El Capitan Lake

LOE ID:	1202
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	241
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Fifteen of 241 samples exceeded 5 ntu. No samples exceeded 20 ntu.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA107.

Temporal Representation: Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33215, Turbidity
EI Capitan Lake

Region 9

LOE ID: 1209

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 213
Number of Exceedances: 22

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Twenty-two of 213 samples exceeded 5 ntu. Three of 213 samples exceeded 20 ntu.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at EI Capitan Reservoir station ECA-0.
Temporal Representation: Samples were collected 2-5 times per month from 01/1996 to 09/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33215, Turbidity
EI Capitan Lake

Region 9

LOE ID: 1208

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 241
Number of Exceedances: 40

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Forty of 241 samples exceeded 5 ntu. Seven of 241 samples exceeded 20 ntu.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA57.
Temporal Representation:	Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity

Region 9

El Capitan Lake

LOE ID:	1207
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996. None of the 6 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA177.
Temporal Representation:	Samples were collected 6 times (once each day) from 01/03/1996 to 02/07/1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity

Region 9

El Capitan Lake

LOE ID:	1210
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	241
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Twenty of 241 samples exceeded 5 ntu. Two of 241 samples exceeded 20 ntu.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA82.
Temporal Representation:	Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity

Region 9

El Capitan Lake

LOE ID:	1204
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	154
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Seven of 154 samples exceeded 5 ntu. No samples exceeded 20 ntu.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA132.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 08/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity**Region 9****El Capitan Lake**

LOE ID:	1200
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	197
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Three of 197 samples exceeded 5 ntu.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 1-7 times per month from 1/1996 to 12/2000. Duplicate samples were collected on some days.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33215, Turbidity**Region 9****El Capitan Lake**

LOE ID:	1205
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	80
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. One of 80 samples was in exceedance of 5 ntu. None of the samples exceeded 20 ntu.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference:	Turbidity is 5 ntu. For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA152.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 01/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33724	Region 9
El Capitan Lake		

Pollutant:	Uranium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan water quality objective for uranium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceeded the Basin Plan objective for Uranium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33724, Uranium	Region 9
El Capitan Lake	

LOE ID:	1211
Pollutant:	Uranium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1998. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for uranium is 20 pCi/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected once each in 04/1998 and 10/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43443	Region 9
El Capitan Lake		

Pollutant:	Vinyl chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceeded the Basin Plan objectives, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43443, Vinyl chloride	Region 9
El Capitan Lake	

LOE ID:	1134
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for vinyl chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33536	Region 9
El Capitan Lake		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Zinc Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle.</p> <p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceeded the Basin Plan objectives, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33536, Zinc

Region 9

El Capitan Lake

LOE ID:	1212
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 16 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 1-5 times per year 04/1996 to 07/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33895

Region 9

El Capitan Lake

Pollutant:	cis-1,2-Dichloroethylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.
	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33895, cis-1,2-Dichloroethylene
El Capitan Lake**

Region 9

LOE ID:	1135
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33895
El Capitan Lake**

Region 9

Pollutant:	meta-para xylenes
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the

2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33896, meta-para xylenes
El Capitan Lake**

Region 9

LOE ID:	1136
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. the sums of the isomers met standards. EPA method 524.2 was used for sample analysis.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33782
El Capitan Lake**

Region 9

Pollutant:	o-Dichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33782, o-Dichlorobenzene

Region 9

El Capitan Lake

LOE ID: 1120

Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	17
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-dichlorobenzene is 0.6 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.

Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33955	Region 9
El Capitan Lake		

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33955, o-Xylene	Region 9
El Capitan Lake	

LOE ID:	1128
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of 17 samples were in exceedance. The sums of xylene isomers met standards.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take

Guideline Reference: [Placeholder reference 2006 303\(d\)](#)

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.

Temporal Representation: Samples were collected on a quarterly basis from 01/1997 to 02/2001.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	43391	Region 9
El Capitan Lake		

Pollutant: p-Dichlorobenzene (DCB)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 17 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43391, p-Dichlorobenzene (DCB)	Region 9
El Capitan Lake	

LOE ID: 1123

Pollutant: p-Dichlorobenzene (DCB)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 17

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1997 to 2001. None of the 17 samples were in exceedance. EPA method 524.2 was used for sample analysis.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1997 to 02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33601	Region 9
El Capitan Lake		

Pollutant:	Color
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 1,376 out of 1,726 samples exceeding the Basin Plan objective, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33601, Color	Region 9
El Capitan Lake	

LOE ID:	1179
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	135
Number of Exceedances:	110
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. There were 110 out of 135 samples that were in exceedance of 15 color units.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA127.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1176
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	192
Number of Exceedances:	155
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. There were 155 out of 192 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 1-6 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1177
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	162
Number of Exceedances:	140
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. There were 140 out of 162 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA102.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 02/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1178
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	241
Number of Exceedances:	171
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. There were 171 out of 241 samples in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA107.
Temporal Representation:	Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color**Region 9****El Capitan Lake**

LOE ID:	1186
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	241
Number of Exceedances:	179
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. There were 179 out of 241 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA82.
Temporal Representation:	Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color**Region 9****El Capitan Lake**

LOE ID:	1180
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	154
Number of Exceedances:	121
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. There were 121 out of 154 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA132.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 08/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1181
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	80
Number of Exceedances:	65
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1999. Sixty-five of 80 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA152.
Temporal Representation:	Samples were collected 3-5 times each month from 01/1996 to 01/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1182
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	55
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1998. Fifty-five of 62 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA157.
Temporal Representation:	Samples were collected 3-5 times per month from 01/1996 to 10/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1183
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996. Six of 6 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA177.
Temporal Representation:	Samples were collected 6 times (once each on different days) from 01/03/1996 to 02/07/1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1184
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	241
Number of Exceedances:	202
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. There were 202 out of 241 samples that were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-GA57.
Temporal Representation:	Samples were collected 1-5 times per month from 01/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33601, Color

Region 9

El Capitan Lake

LOE ID:	1185
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	212
Number of Exceedances:	122
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One hundred and seventy-two out of 212 samples were in exceedance. An exceedance of standards occurred during all sampling years.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation: Samples were collected 2-5 times per month from 01/1996 to 09/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 42774		Region 9
El Capitan Lake		
Pollutant:	Manganese	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Thirteen of 64 samples exceeded the Basin Plan water quality objective for manganese and 4 out of 5 years had exceedances more than 10% of the time. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Thirteen of 64 samples exceeded the Basin Plan water quality objective for manganese. Four out of 5 years had exceedances more than 10% of the time and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.	
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>	

Line of Evidence (LOE) for Decision ID 42774, Manganese		Region 9
El Capitan Lake		
LOE ID:	1190	
Pollutant:	Manganese	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	

Number of Samples:	64
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Thirteen of 64 samples were in exceedance of 0.05 mg/L. Four out of 5 years had exceedances more than 10% or the time.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in El Capitan Lake is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected 1-2 times monthly from 01/1996 to 11/2000, with the exception of 01/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44703	Region 9
El Capitan Lake		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Six of the seven samples exceed the Basin Plan water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the seven samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44703, Phosphorus
El Capitan Lake**

Region 9

LOE ID:	6158
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Six of seven samples exceeded the water quality objective. Data was collected by the City of San Diego's Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs between January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007). A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at El Capitan Lake at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the City of San Diego's Water Quality Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	Water Quality Laboratory, Quality Assurance Manual

**DECISION ID 43926
El Capitan Lake**

Region 9

Pollutant: Total Nitrogen as N
Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. (with update to table 3.1)</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Thirty of the thirty-five samples exceed the Basin Plan water quality objective for total nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty of the thirty-five samples exceed the Basin Plan water quality objective for total nitrogen as N and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 43926, Total Nitrogen as N El Capitan Lake

Region 9

LOE ID:	6157
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	30
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirty of 35 samples exceeded the water quality objective. Data was collected by the City of San Diego's Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs from January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007). A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at El Capitan Lake at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the City of San Diego's Water Quality Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

DECISION ID	32680	Region 9
El Capitan Lake		
Pollutant:	pH	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 57 samples exceeded the Basin Plan objective, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.	
Line of Evidence (LOE) for Decision ID 32680, pH		Region 9

El Capitan Lake

LOE ID:	1193
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Ten of 57 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Capitan Reservoir station ECA-0.
Temporal Representation:	Samples were collected monthly from 01/1996 to 12/2000, except for 01/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sweetwater Reservoir](#)
Water Body ID: CAL9092100019991117112141
Water Body Type: Lake & Reservoir

DECISION ID	37545	Region 9
Sweetwater Reservoir		

Pollutant: Alachlor
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 89 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37545, Alachlor Sweetwater Reservoir

Region 9

LOE ID: 1393

Pollutant: Alachlor
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37545, Alachlor	Region 9
Sweetwater Reservoir	

LOE ID:	1398
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 01/2001. None of the 16 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 01/2001. Samples were collected in 07/1997, 11/1997, on a quarterly basis from 1998-2000, and in 01/2001. Samples were collected once per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37545, Alachlor	Region 9
Sweetwater Reservoir	

LOE ID:	1391
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37545, Alachlor
Sweetwater Reservoir

Region 9

LOE ID:	1397
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 37545, Alachlor
Sweetwater Reservoir**

Region 9

LOE ID:	76873
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All seven samples analyzed did not exceed the water quality objective for alachlor thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation byreference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California primary MCL for alachlor is 2 ug/L for drinking water.
Guideline Reference:	
Spatial Representation:	The seven samples were collected from Sweetwater Reservoir.
Temporal Representation:	The samples was collected between Jan. 11, 2006 and July 10, 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37545, Alachlor
Sweetwater Reservoir**

Region 9

LOE ID:	1395
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37545, Alachlor

Region 9

Sweetwater Reservoir

LOE ID:	1394
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37545, Alachlor

Region 9

Sweetwater Reservoir

LOE ID:	1396
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37545, Alachlor
Sweetwater Reservoir

Region 9

LOE ID:	1392
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Sweetwater Reservoir near Vista del Lago station.

Temporal Representation:

Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID

43042

Region 9

Sweetwater Reservoir

Pollutant:

Chromium

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:

Revision Status

Revised

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the five samples exceed the water quality objective for chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the five samples exceed the water quality objective for chromium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43042, Chromium

Region 9

Sweetwater Reservoir

LOE ID:

1451

Pollutant:

Chromium (total)

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total

Beneficial Use:

Municipal & Domestic Supply

Number of Samples:

5

Number of Exceedances:

0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Total Chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per day on 5 days from 02/1998 to 02/2000. Samples were also collected in 08/1998 , 02/1999, and 07/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	50167	Region 9
Sweetwater Reservoir		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of seven samples did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of seven samples did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50167, Diazinon	Region 9
Sweetwater Reservoir	

LOE ID:	76875
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	The samples were collected from Sweetwater Reservoir.
Temporal Representation:	The samples was collected between Jan. 11, 2006 and July 10, 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	50198	Region 9
Sweetwater Reservoir		
Pollutant:	Indicator Bacteria	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence are necessary to assess listing status.</p> <p>Ten lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Enterococcus</p> <p>163 of 1836 samples exceed the single sample objective for water contact recreation.</p> <p>166 of 1794 sample exceed the geometric mean objective for water contact recreation.</p> <p>Escherichia coli</p> <p>26 of 1837 samples exceed the single sample objective for water contact recreation.</p> <p>3 of 1975 samples exceed the geometric mean objective for water contact recreation.</p>	

Total coliform
 0 of 1000 samples exceeds the single sample objective for water contact recreation.
 116 of 771 samples exceed the geometric mean objective for water contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

Enterococcus
 163 of 1836 samples exceed the single sample objective for water contact recreation.
 166 of 1794 sample exceed the geometric mean objective for water contact recreation.

Escherichia coli
 26 of 1837 samples exceed the single sample objective for water contact recreation.
 3 of 1975 samples exceed the geometric mean objective for water contact recreation.

Total coliform
 0 of 1000 samples exceeds the single sample objective for water contact recreation.
 116 of 771 samples exceed the geometric mean objective for water contact recreation.
 The samples do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
 4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
 Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50198, Indicator Bacteria

Region 9

Sweetwater Reservoir

LOE ID:	76896
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1837
Number of Exceedances:	26
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-six of the 1837 samples exceeded the E.coli objective of 235/100 ml. When the results for the nine sites are averaged on the same day, the results are 6 exceedances out of 361. The exceedances were not grouped at any particular site.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E. coli criteria applicable to waters designated for contact recreation of 235/100ml. ref 2539 Region 9 Basin Plan
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at nine different locations in Sweetwater Reservoir.
Temporal Representation:	Samples were collected from January 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.

Line of Evidence (LOE) for Decision ID 50198, Indicator Bacteria**Region 9****Sweetwater Reservoir**

LOE ID:	76876
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1836
Number of Exceedances:	163
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred sixty-three of the 1835 samples exceeded the enterococcus objective. When the results for the nine sites are averaged on the same day, the results are 44 exceedances out of 361. The exceedances were not grouped at any particular site.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The enterococcus concentration shall not exceed 61/100ml. Region 9 Basin Plan EPA
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at nine different locations in Sweetwater Reservoir.
Temporal Representation:	Samples were collected from January 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50198, Indicator Bacteria**Region 9****Sweetwater Reservoir**

LOE ID:	76895
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1794
Number of Exceedances:	166
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred sixty-six of the 1794 samples exceeded the enterococcus geomean objective.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geometric mean: The enterococcus concentration shall not exceed 33/100ml. Region 9 Basin Plan EPA

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at nine different locations in Sweetwater Reservoir.
Temporal Representation:	Samples were collected from January 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50198, Indicator Bacteria	Region 9
Sweetwater Reservoir	

LOE ID:	76918
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1000
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of 1000 samples exceeded the total coliform objective. There is an additional 837 samples with the result reported as >2419.6. These could not be compared to the objective because detection limit was not adequate. These 837 samples may not be meeting the objective since the result was reported as >2419.6.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total coliform shall not exceed 10,000/100ml. Guidance for Fresh Water Beaches CDPH, 2006. ref 2531
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Samples were collected at nine different locations in Sweetwater Reservoir.
Temporal Representation:	Samples were collected from January 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50198, Indicator Bacteria	Region 9
Sweetwater Reservoir	

LOE ID:	76897
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	1795
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 1795 samples exceeded the E. coli geomean objective.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Geometric mean: The E. coli criteria applicable to waters designated for contact recreation of 126/100ml. Region 9 Basin Plan EPA
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected at nine different locations in Sweetwater Reservoir.
Temporal Representation:	Samples were collected from January 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50198, Indicator Bacteria

Region 9

Sweetwater Reservoir

LOE ID:	76917
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	771
Number of Exceedances:	116
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred and sixteen of the 771 samples exceeded the total coliform geometric mean objective. There is an additional 837 samples that were not included in the geomean calculation with the result reported as >2419.6. These 837 samples may not be meeting the objective.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Geomean: Total coliform shall not exceed 1000/100ml. Guidance for Fresh Water Beaches CDPH, 2006. ref 2531
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Samples were collected at nine different locations in Sweetwater Reservoir.

Temporal Representation:	Samples were collected from January 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.
QAPP Information Reference(s):	

DECISION ID	52010	Region 9
Sweetwater Reservoir		

Pollutant:	Nitrogen, Nitrate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 16 samples exceeded the objective, but the data are of uncertain quality (no QAPP).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used do not satisfy the data quality requirements of section 6.1.4 of the Policy (no QAPP).
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 16 samples exceeded the objective, though the data are of uncertain quality.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52010, Nitrogen, Nitrate	Region 9
Sweetwater Reservoir	

LOE ID:	76901
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight samples were collected with no samples detecting nitrite as N. However, it cannot be determined whether the reporting limit was below the water quality objective and therefore whether samples met the water quality objective.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	San Diego Region Basin Plan: Water designated for use as MUN shall not contain concentrations of inorganic chemicals in excess of the MCL set in the California Code of Regulations. The California MCL for nitrite as N is 1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater River Influent.
Temporal Representation:	Samples were collected biannually from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data was submitted with an unsigned water quality monitoring plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52010, Nitrogen, Nitrate
Sweetwater Reservoir

Region 9

LOE ID:	76900
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight samples were collected with no samples detecting nitrite as N. However, it cannot be determined whether the reporting limit was below the water quality objective and therefore whether samples met the water quality objective.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	San Diego Region Basin Plan: Water designated for use as MUN shall not contain concentrations of inorganic chemicals in excess of the MCL set in the California Code of Regulations. The California MCL for nitrite as N is 1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Lake Surface.
Temporal Representation:	Samples were collected biannually from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data was submitted with an unsigned water quality monitoring plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52010, Nitrogen, Nitrate
Sweetwater Reservoir

Region 9

LOE ID:	76898
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	0 of 8 samples exceed the objective for nitrate (as N) at 10 mg/L. 7 of the 8 samples are reported as non-detects. These non-detects are less than or equal to the water quality standard, the value will be considered as meeting the water quality standard, objective, criterion, or evaluation guideline.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (2011): Waters designated for MUN shall not contain concentrations of chemical constituents in excess of the MCL specified in Title 22 of the California Code of Regulations. The nitrate (as N) MCL is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected at Sweetwater Lake Surface.
Temporal Representation:	Samples were collected biannually from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data was submitted with an unsigned water quality monitoring plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52010, Nitrogen, Nitrate Sweetwater Reservoir

Region 9

LOE ID:	76899
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	0 of 8 samples exceed the objective for nitrate (as N) at 10 mg/L. 7 of 8 samples are reported as non-detects. These non-detects are less than or equal to the water quality standard, the value will be considered as meeting the water quality standard, objective, criterion, or evaluation guideline.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (2011): Waters designated for MUN shall not contain concentrations of chemical constituents in excess of the MCL specified in Title 22 of the California Code of Regulations. The nitrate (as N) MCL is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Spatial Representation:	Samples were collected at Sweetwater River Influent.
Temporal Representation:	Samples were collected biannually from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data was submitted with an unsigned water quality monitoring plan.
QAPP Information Reference(s):	

DECISION ID	33084	Region 9
Sweetwater Reservoir		

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. None of the 97 samples exceeded the Basin Plan water quality objective for simazine.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 97 samples exceeded the Basin Plan water quality objective for simazine and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33084, Simazine	Region 9
Sweetwater Reservoir	

LOE ID:	1432
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33084, Simazine
Sweetwater Reservoir

Region 9

LOE ID:	76916
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All sixteen samples analyzed for Simazine were not detected above the method detection limit.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Maximum Contamination Limit for Simazine in drinking water is 4 ug/L.
Guideline Reference:	
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007..
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33084, Simazine
Sweetwater Reservoir

Region 9

LOE ID:	1434
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Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 6 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33084, Simazine

Region 9

Sweetwater Reservoir

LOE ID:	1433
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33084, Simazine

Region 9

Sweetwater Reservoir

LOE ID: 1431
Pollutant: Simazine
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 12
Number of Exceedances: 0
Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Samples were collected at Sweetwater Reservoir near the center of the minimum pool.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33084, Simazine

Region 9

Sweetwater Reservoir

LOE ID: 1430
Pollutant: Simazine
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 9
Number of Exceedances: 0
Data and Information Type: Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33084, Simazine

Region 9

Sweetwater Reservoir

LOE ID:	1436
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 01/2001. None of the 16 samples were in exceedance. Most samples except 2 were reported as non-detect. However, the 2 detectable samples were still below the WQO (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 01/2001. Samples were collected in 07/1997, 11/1997, on a quarterly basis from 1998-2000, and in 01/2001. Samples were collected once per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33084, Simazine

Region 9

Sweetwater Reservoir

LOE ID:	1435
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33084, Simazine

Region 9

Sweetwater Reservoir

LOE ID:	1429
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Sweetwater Reservoir near the pump tower.

Temporal Representation:

Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID	43969	Region 9
Sweetwater Reservoir		

Pollutant: 1,1,1-Trichloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 70 samples exceeded the Basin Plan objective for 1,1,1-Trichloroethane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceeded the California Toxics Rule objective for 1,1,1-Trichloroethane, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane	Region 9
Sweetwater Reservoir	

LOE ID: 1232

Pollutant: 1,1,1-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected twice per day on one day, every other month for a year from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane Sweetwater Reservoir

Region 9

LOE ID:	1239
Pollutant:	1,1,1-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane

Region 9

Sweetwater Reservoir

LOE ID:	1237
Pollutant:	1,1,1-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples was in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/10/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane

Region 9

Sweetwater Reservoir

LOE ID:	1236
Pollutant:	1,1,1-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month for 10 months from 09/20/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane
Sweetwater Reservoir

Region 9

LOE ID: 1234

Pollutant: 1,1,1-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation: Samples were collected 2 times per day on one day every other month for a year from 09/09/1998 to 09/20/1998.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane
Sweetwater Reservoir

Region 9

LOE ID: 1233

Pollutant: 1,1,1-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day, one day every other month for 10 months from 09/20/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane

Region 9

Sweetwater Reservoir

LOE ID:	1238
Pollutant:	1,1,1-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cover Pond.
Temporal Representation:	Samples were collected 1-2 times on one day every other month from 09/10/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43969, 1,1,1-Trichloroethane

Region 9

Sweetwater Reservoir

LOE ID:	1235
Pollutant:	1,1,1-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected twice per day on one day every other month for 10 months from 09/10/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	37843	Region 9
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Sweetwater Reservoir

Pollutant:	1,1,2,2-Tetrachloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 70 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane
Sweetwater Reservoir**

Region 9

LOE ID:	1311
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane
Sweetwater Reservoir**

Region 9

LOE ID:	1315
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane
Sweetwater Reservoir

Region 9

LOE ID:	1318
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane
Sweetwater Reservoir

Region 9

LOE ID:	1317
Pollutant:	1,1,2,2-Tetrachloroethane

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane Sweetwater Reservoir

Region 9

LOE ID:	1316
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to

09/20/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane **Region 9**
Sweetwater Reservoir

LOE ID: 1314

Pollutant: 1,1,2,2-Tetrachloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane **Region 9**
Sweetwater Reservoir

LOE ID: 1313

Pollutant: 1,1,2,2-Tetrachloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37843, 1,1,2,2-Tetrachloroethane Sweetwater Reservoir

Region 9

LOE ID:	1312
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID 32660
Sweetwater Reservoir

Region 9

Pollutant: 1,1,2-Trichloroethane

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceeded the Basin Plan criteria (all were 'non-detects'), and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane

Region 9

Sweetwater Reservoir

LOE ID:	1246
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day, one day every other month from 09/10/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.

**Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane
Sweetwater Reservoir****Region 9**

LOE ID:	1244
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day, one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane
Sweetwater Reservoir****Region 9**

LOE ID:	1245
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end of the reservoir fill boundary.
Temporal Representation:	Samples were collected once per day, one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane

Region 9

Sweetwater Reservoir

LOE ID:	1240
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane

Region 9

Sweetwater Reservoir

LOE ID:	1243
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day, one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane
Sweetwater Reservoir

Region 9

LOE ID:	1242
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day, one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring

Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane
Sweetwater Reservoir**

Region 9

LOE ID:	1247
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 32660, 1,1,2-Trichloroethane
Sweetwater Reservoir**

Region 9

LOE ID:	1241
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day, one day every other month from 09/10/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33042	Region 9
Sweetwater Reservoir		

Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceeded the Basin Plan criteria (all were 'non-detects'), and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	Region 9
Sweetwater Reservoir	

LOE ID:	1253
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day, on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	Region 9
Sweetwater Reservoir	

LOE ID:	1252
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day, on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	Region 9
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Sweetwater Reservoir

LOE ID:	1250
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day, on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride

Region 9

Sweetwater Reservoir

LOE ID:	1251
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Sweetwater Reservoir near the recreation area.
Samples were collected 1-2 times per day, on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
Sweetwater Reservoir

Region 9

LOE ID: 1249

Pollutant: 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. All samples were below the detection limit (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Samples were collected 1-2 times per day, on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
Sweetwater Reservoir

Region 9

LOE ID: 1255

Pollutant: 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride

Region 9

Sweetwater Reservoir

LOE ID:	1248
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day, on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33042, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride

Region 9

Sweetwater Reservoir

LOE ID:	1254
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1- Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day, on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID

37173

Region 9

Sweetwater Reservoir

Pollutant:	1,2,4-Trichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 70 samples exceeded the Basin Plan criteria (all were 'non-detects'), and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene
Sweetwater Reservoir**

Region 9

LOE ID:	1269
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene
Sweetwater Reservoir**

Region 9

LOE ID:	1265
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. All samples were below the detection limit (USGS, 2002).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene

Region 9

Sweetwater Reservoir

LOE ID:	1270
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene

Region 9

Sweetwater Reservoir

LOE ID:	1271
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Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene

Region 9

Sweetwater Reservoir

LOE ID:	1264
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to

09/20/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene
Sweetwater Reservoir

Region 9

LOE ID: 1268

Pollutant: 1,2,4-Trichlorobenzene

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance. All samples were below the detection limit (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene
Sweetwater Reservoir

Region 9

LOE ID: 1266

Pollutant: 1,2,4-Trichlorobenzene

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. All samples were below the detection limit (USGS, 2002).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37173, 1,2,4-Trichlorobenzene
Sweetwater Reservoir

Region 9

LOE ID:	1267
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID 37788
Sweetwater Reservoir

Region 9

Pollutant: 1,2-Dichloroethane

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan objective, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Basin Plan Objective for 1,2-Dichloroethane, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37788, 1,2-Dichloroethane
Sweetwater Reservoir

Region 9

LOE ID:	1466
Pollutant:	1,2-Dichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003), (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloroethane is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33492	Region 9
Sweetwater Reservoir		

Pollutant:	1,2-Dichloroethylene,-trans
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceeded the Basin Plan criteria (all were 'non-detects'), and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans	Region 9
Sweetwater Reservoir	

LOE ID:	1259
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans
Sweetwater Reservoir

Region 9

LOE ID:	1258
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans
Sweetwater Reservoir

Region 9

LOE ID:	1260
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 8 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans
Sweetwater Reservoir**

Region 9

LOE ID:	1256
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring

Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans
Sweetwater Reservoir**

Region 9

LOE ID:	1257
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans
Sweetwater Reservoir**

Region 9

LOE ID:	1263
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB 9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans	Region 9
Sweetwater Reservoir	

LOE ID:	1262
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33492, 1,2-Dichloroethylene,-trans	Region 9
Sweetwater Reservoir	

LOE ID:	1261
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance. All samples were below the detection limit (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2- Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	37697	Region 9
Sweetwater Reservoir		

Pollutant:	1,2-Dichloropropane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Four samples exceeded the Basin Plan Objective for 1,2-Dichloropropane, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.
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Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37697, 1,2-Dichloropropane

Region 9

Sweetwater Reservoir

LOE ID: 1467

Pollutant: 1,2-Dichloropropane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (USGS, 2002), (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2-Dichloropropane is 0.005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation: Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

37677

Region 9

Sweetwater Reservoir

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the basin plan objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37677, Aluminum

Region 9

Sweetwater Reservoir

LOE ID:	1445
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 4 days from 12/1997 to 02/24/2000. One of 4 samples was in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. No exact location was given.
Temporal Representation:	Samples were collected 4 times from 12/1997 to 02/2000. One sample was collected each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33374

Region 9

Sweetwater Reservoir

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Five samples exceeded the Basin Plan Objective for Antimony, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33374, Antimony

Region 9

Sweetwater Reservoir

LOE ID:	1446
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. The exact location was not reported.
Temporal Representation:	Five samples were collected from 02/1998 to 02/2000. Samples were collected in 02/1998, 08/1998, 02/1999, 07/1999, and 02/2000. One sample was collected per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33388	Region 9
Sweetwater Reservoir		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan water quality objective for arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Basin Plan water quality objective for arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33388, Arsenic	Region 9
Sweetwater Reservoir	

LOE ID:	1447
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 6 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	One sample per day was collected on 6 days from 02/1998 to 02/2000. Samples were collected in 02/1998, 05/1998, 08/1998, 02/1999, 07/1999, and 02/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33454	Region 9
Sweetwater Reservoir		

Pollutant:	Atrazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Nine lines of evidence are available in the administrative record to assess this pollutant. 2006: None of the 82 samples exceed the Basin Plan water quality objective of 0.003 mg/l for atrazine. 2014: None of the seven samples exceed the Basin Plan water quality objective of 0.001 mg/l for atrazine.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 89 samples exceed the Basin Plan water quality objective for atrazine and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33454, Atrazine	Region 9
Sweetwater Reservoir	

LOE ID:	1402
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33454, Atrazine
Sweetwater Reservoir**

Region 9

LOE ID:	76874
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All seven samples analyzed did not exceed the water quality objective for atrazine thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation byreference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California primary MCL for Atrazine in drinking water is 1 ug/L.
Guideline Reference:	

Spatial Representation:	The seven samples were collected from Sweetwater Reservoir.
Temporal Representation:	The samples was collected between Jan. 11, 2006 and July 10, 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33454, Atrazine

Region 9

Sweetwater Reservoir

LOE ID:	1406
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 01/2001. None of the 16 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 01/2001. Samples were collected in 07/1997, 11/1997, on a quarterly basis from 1998-2000, and in 01/2001. Samples were collected once per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33454, Atrazine

Region 9

Sweetwater Reservoir

LOE ID:	1404
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33454, Atrazine

Region 9

Sweetwater Reservoir

LOE ID:	1403
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33454, Atrazine

Region 9

Sweetwater Reservoir

LOE ID:	1401
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33454, Atrazine
Sweetwater Reservoir

Region 9

LOE ID:	1400
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Samples were collected at Sweetwater Reservoir near Vista del Lago station.

Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

Line of Evidence (LOE) for Decision ID 33454, Atrazine

Region 9

Sweetwater Reservoir

LOE ID: 1399

Pollutant: Atrazine

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Samples were collected at Sweetwater Reservoir near the pump tower.

Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

Line of Evidence (LOE) for Decision ID 33454, Atrazine

Region 9

Sweetwater Reservoir

LOE ID: 1405

Pollutant: Atrazine

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33389	Region 9
Sweetwater Reservoir		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the four samples exceed the Basin Plan water quality objective for Barium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the four samples exceed the Basin Plan water quality objective for Barium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33389, Barium
Sweetwater Reservoir**

Region 9

LOE ID:	1448
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 12/1997 to 02/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per day on 4 days from 12/1997 to 02/2000. Samples were also collected in 06/1998 and 07/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33278
Sweetwater Reservoir**

Region 9

Pollutant:	Benzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for benzene. All samples were 'non-detects'.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceed the Basin Plan water quality objective for benzene. All samples were 'non-detects'. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33278, Benzene

Region 9

Sweetwater Reservoir

LOE ID:	1288
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33278, Benzene

Region 9

Sweetwater Reservoir

LOE ID:	1289
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33278, Benzene

Region 9

Sweetwater Reservoir

LOE ID:	1290
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33278, Benzene
Sweetwater Reservoir**

Region 9

LOE ID:	1292
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33278, Benzene
Sweetwater Reservoir**

Region 9

LOE ID:	1293
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference: Benzene is 0.001 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
 Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
 QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33278, Benzene
 Sweetwater Reservoir**

Region 9

LOE ID: 1287

Pollutant: Benzene
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13
 Number of Exceedances: 0

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near the pump tower.
 Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:
 QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33278, Benzene
 Sweetwater Reservoir**

Region 9

LOE ID: 1294

Pollutant: Benzene
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33278, Benzene

Region 9

Sweetwater Reservoir

LOE ID:	1291
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33443	Region 9
Sweetwater Reservoir		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan water quality objective for beryllium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Basin Plan water quality objective for beryllium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33443, Beryllium	Region 9
Sweetwater Reservoir	

LOE ID:	1449
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not recorded.
Temporal Representation:	Samples were collected once per day on 5 days from 02/1998 to 02/2000. Samples were also collected in 08/1998, 02/1999, and 07/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33102	Region 9
Sweetwater Reservoir		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan water quality objective for cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Basin Plan water quality objective for cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33102, Cadmium	Region 9
Sweetwater Reservoir	

LOE ID: 1450

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per day on 5 days form 02/1998 to 02/2000. Samples were also collected in 08/1998, 02/1999, 07/1999, and 02/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32734	Region 9
Sweetwater Reservoir		

Pollutant:	Carbofuran
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Seven lines of evidence are available in the administrative record to assess this pollutant. None of the 65 samples exceed the Basin Plan water quality objective carbofuran.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 65 samples exceed the Basin Plan water quality objective carbofuran and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32734, Carbofuran

Region 9

Sweetwater Reservoir

LOE ID:	1411
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32734, Carbofuran

Region 9

Sweetwater Reservoir

LOE ID:	1412
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 6 samples were in

Data Reference:	exceedance (USGS, 2002). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32734, Carbofuran

Region 9

Sweetwater Reservoir

LOE ID:	1413
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32734, Carbofuran

Region 9

Sweetwater Reservoir

LOE ID:	1409
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Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32734, Carbofuran
Sweetwater Reservoir

Region 9

LOE ID:	1407
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32734, Carbofuran

Region 9

Sweetwater Reservoir

LOE ID:	1408
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32734, Carbofuran

Region 9

Sweetwater Reservoir

LOE ID:	1410
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33049	Region 9
Sweetwater Reservoir		

Pollutant:	Carbon tetrachloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the four samples exceed the Basin Plan water quality objective for carbon tetrachloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the four samples exceed the Basin Plan water quality objective for carbon tetrachloride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33049, Carbon tetrachloride	Region 9
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Sweetwater Reservoir

LOE ID:	1468
Pollutant:	Carbon tetrachloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbon tetrachloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33217	Region 9
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Sweetwater Reservoir

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan water quality objective for chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 8 samples exceed the Basin Plan water quality objective for chloride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33217, Chloride

Region 9

Sweetwater Reservoir

LOE ID:	1464
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 11/2000. None of the 8 samples were in exceedance (RWQCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 11/2000 once per day on 8 days during this time span. Samples were collected during the summer and winter months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID

33264

Region 9

Sweetwater Reservoir

Pollutant:	Chlorobenzene (mono)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for chlorobenzene (mono).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 70 samples exceed the Basin Plan water quality objective for chlorobenzene (mono) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)

Region 9

Sweetwater Reservoir

LOE ID:	1297
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)**Region 9****Sweetwater Reservoir**

LOE ID:	1301
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)**Region 9****Sweetwater Reservoir**

LOE ID:	1299
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)**Region 9****Sweetwater Reservoir**

LOE ID:	1300
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)**Region 9****Sweetwater Reservoir**

LOE ID:	1295
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)

Region 9

Sweetwater Reservoir

LOE ID:	1302
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)**Region 9****Sweetwater Reservoir**

LOE ID:	1296
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33264, Chlorobenzene (mono)**Region 9****Sweetwater Reservoir**

LOE ID:	1298
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33150	Region 9
Sweetwater Reservoir		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Basin Plan water quality objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33150, Copper		Region 9
Sweetwater Reservoir		

LOE ID:	1452
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 12/1997 to 02/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per day on 12/15/1997, 06/17/1997, 07/15/1999, and 02/24/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	38119	Region 9
Sweetwater Reservoir		

Pollutant:	Dichloromethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 69 samples exceed the Basin Plan water quality objective for dichloromethane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 69 samples exceed the Basin Plan water quality objective for dichloromethane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 38119, Dichloromethane
Sweetwater Reservoir**

Region 9

LOE ID:	1332
Pollutant:	Dichloromethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 38119, Dichloromethane
Sweetwater Reservoir**

Region 9

LOE ID:	1333
Pollutant:	Dichloromethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38119, Dichloromethane	Region 9
Sweetwater Reservoir	

LOE ID:	1328
Pollutant:	Dichloromethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38119, Dichloromethane	Region 9
Sweetwater Reservoir	

LOE ID:	1327
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Pollutant:	Dichloromethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38119, Dichloromethane

Region 9

Sweetwater Reservoir

LOE ID:	1330
Pollutant:	Dichloromethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38119, Dichloromethane

Region 9

Sweetwater Reservoir

LOE ID: 1331

Pollutant: Dichloromethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38119, Dichloromethane

Region 9

Sweetwater Reservoir

LOE ID: 1334

Pollutant: Dichloromethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 08/1998, 08/1999, and 10/2000. None of the 3 samples

Data Reference:	were in exceedance (RWQCB, 2003). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38119, Dichloromethane

Region 9

Sweetwater Reservoir

LOE ID:	1329
Pollutant:	Dichloromethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID

33079

Region 9

Sweetwater Reservoir

Pollutant: Ethylbenzene

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for ethylbenzene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceed the Basin Plan water quality objective for ethylbenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene
Sweetwater Reservoir

Region 9

LOE ID:	1321
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene

Region 9

Sweetwater Reservoir

LOE ID:	1322
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene

Region 9

Sweetwater Reservoir

LOE ID:	1323
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene

Region 9

Sweetwater Reservoir

LOE ID:	1320
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene

Region 9

Sweetwater Reservoir

LOE ID:	1325
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene
Sweetwater Reservoir

Region 9

LOE ID:	1326
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene

Region 9

Sweetwater Reservoir

LOE ID:	1319
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33079, Ethylbenzene

Region 9

Sweetwater Reservoir

LOE ID:	1324
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of 7 the samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33162	Region 9
Sweetwater Reservoir		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan water quality objective for flouride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 8 samples exceed the Basin Plan water quality objective for flouride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33162, Fluoride	Region 9
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Sweetwater Reservoir

LOE ID:	1463
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 11/2000. None of the 8 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 11/2000 once per day on 8 days in the time span. Samples were collected during winter and summer months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	37698	Region 9
Sweetwater Reservoir		

Pollutant:	Glyphosate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 13 samples exceed the Basin Plan water quality objective for glyphosate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 13 samples exceed the Basin Plan water quality objective for glyphosate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37698, Glyphosate
Sweetwater Reservoir**

Region 9

LOE ID:	1469
Pollutant:	Glyphosate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 01/2001. None of the 13 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Glyphosate is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 01/2001. One sample per month was collected in 07/1997, 11/1997, 08/1998, 10/1998, and 01/2001. Samples were collected on a quarterly basis in 1999 and 2000. Samples were collected once per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 38106
Sweetwater Reservoir**

Region 9

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 4 samples exceed the Basin Plan water quality objective for iron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the Basin Plan water quality objective for iron and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 38106, Iron		Region 9
Sweetwater Reservoir		
LOE ID:	1453	
Pollutant:	Iron	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	4	
Number of Exceedances:	1	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 12/1997 to 02/2000. One of 4 samples was in exceedance (SWRCB, 2003).	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Iron is 0.3 mg/L.	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.	
Temporal Representation:	Samples were collected once per day on 12/15/1997, 06/17/1998, 07/15/1999, and 02/24/2000.	
Environmental Conditions:		
QAPP Information:	Data used in 2002 assessment.	
QAPP Information Reference(s):		

DECISION ID	33260	Region 9
Sweetwater Reservoir		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. None of the 65 samples exceed the water quality objective for lindane/gamma hexachlorocyclohexane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 65 samples exceed the water quality objective for lindane/gamma hexachlorocyclohexane and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33260, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Sweetwater Reservoir	

LOE ID: 1414
Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 13
Number of Exceedances: 0
Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)
SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33260, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Sweetwater Reservoir

LOE ID:	1415
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33260, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Sweetwater Reservoir

LOE ID:	1416
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33260, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Sweetwater Reservoir

LOE ID:	1420
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.

Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33260, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Sweetwater Reservoir

LOE ID:	1418
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33260, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Sweetwater Reservoir

LOE ID:	1419
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 6 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33260, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Sweetwater Reservoir

LOE ID:	1417
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID

37761

Region 9

Sweetwater Reservoir

Pollutant: Manganese

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status

Original

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the four samples exceed the Basin Plan water quality objective for manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the four samples exceed the Basin Plan water quality objective for manganese and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37761, Manganese

Region 9

Sweetwater Reservoir

LOE ID: 1454

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by RWQCB9 from 12/1997 to 02/2000. One of 4 samples was in exceedance (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The water quality objective for manganese in Sweetwater Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This

Objective/Criterion Reference: [concentration is not be exceeded more than 10% of the time during any one year period. Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation: Samples were collected once per day on 12/15/1997, 06/17/1998, 07/15/1999, and 02/24/2000.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33225	Region 9
Sweetwater Reservoir		

Pollutant: Mercury
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan water quality objective for Mercury.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 5 samples exceed the Basin Plan water quality objective for Mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33225, Mercury	Region 9
Sweetwater Reservoir	

LOE ID: 1455

Pollutant: Mercury
 LOE Subgroup: Pollutant-Water
 Matrix: Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per day on 02/25/1998, 08/04/1998, 02/09/1999, 07/15/1999, and 02/24/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33083	Region 9
Sweetwater Reservoir		

Pollutant:	Molinate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 81 samples exceed the Basin Plan water quality objective for molinate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 81 samples exceed the Basin Plan water quality objective for molinate and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33083, Molinate

Region 9

Sweetwater Reservoir

LOE ID: 1425

Pollutant: Molinate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33083, Molinate

Region 9

Sweetwater Reservoir

LOE ID: 1422

Pollutant: Molinate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 07/12/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33083, Molinate
Sweetwater Reservoir

Region 9

LOE ID:	1427
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33083, Molinate
Sweetwater Reservoir

Region 9

LOE ID:	1428
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 01/2001. None of the 16 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 01/2001. Samples were collected in 07/1997, 11/1997, on a quarterly basis from 1998-2000, and in 01/2001. Samples were collected once per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33083, Molinate

Region 9

Sweetwater Reservoir

LOE ID:	1421
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33083, Molinate

Region 9

Sweetwater Reservoir

LOE ID: 1424

Pollutant: Molinate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33083, Molinate

Region 9

Sweetwater Reservoir

LOE ID: 1423

Pollutant: Molinate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33083, Molinate

Region 9

Sweetwater Reservoir

LOE ID:	1426
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 6 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID

33226

Region 9

Sweetwater Reservoir

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the five samples exceed the Basin Plan water quality objective for nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the five samples exceed the Basin Plan water quality objective for nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33226, Nickel

Region 9

Sweetwater Reservoir

LOE ID: 1456

Pollutant: Nickel

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 5

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for nickel is 0.1 mg/L

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:	Samples were collected at Sweetwater Reservoir. The exact location was not reported.
Temporal Representation:	Samples were collected once per day on 02/25/2998, 08/04/1998, 02/09/1999, 07/15/1999, and 02/24/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44469	Region 9
Sweetwater Reservoir		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 5 samples exceed the Basin Plan water quality objective for selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44469, Selenium	Region 9
Sweetwater Reservoir	

LOE ID:	1457
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. The exact location was not reported.
Temporal Representation:	Samples were collected once per day on 02/25/1998, 08/04/1998, 02/09/1999, 07/15/1999, and 02/24/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33227	Region 9
Sweetwater Reservoir		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan water quality objective for silver.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Basin Plan water quality objective for silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Sweetwater Reservoir

LOE ID:	1458
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 12/1997 to 02/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per day on 12/15/1997, 06/17/1998, 07/15/1999, and 02/24/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33038

Region 9

Sweetwater Reservoir

Pollutant:	Styrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceeded the Basin Plan water quality objective for styrene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceeded the Basin Plan water quality objective for styrene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33038, Styrene

Region 9

Sweetwater Reservoir

LOE ID:	1355
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33038, Styrene

Region 9

Sweetwater Reservoir

LOE ID:	1358
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33038, Styrene

Region 9

Sweetwater Reservoir

LOE ID:	1354
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33038, Styrene**Region 9****Sweetwater Reservoir**

LOE ID:	1353
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33038, Styrene**Region 9****Sweetwater Reservoir**

LOE ID:	1351
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.

Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33038, Styrene	Region 9
Sweetwater Reservoir	

LOE ID:	1352
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33038, Styrene	Region 9
Sweetwater Reservoir	

LOE ID:	1357
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33038, Styrene

Region 9

Sweetwater Reservoir

LOE ID:	1356
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33362	Region 9
Sweetwater Reservoir		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan water quality objective for sulfates.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 8 samples exceed the Basin Plan water quality objective for sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33362, Sulfates	Region 9
Sweetwater Reservoir	

LOE ID:	1465
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 11/2000. None of the 8 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 11/2000 once per day on 8 days during this time span. Samples were collected during the summer and winter months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	38041	Region 9
Sweetwater Reservoir		

Pollutant:	Tetrachloroethylene/PCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceeded the Basin Plan water quality objective for tetrachloroethylene/PCE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 70 samples exceeded the Basin Plan water quality objective for tetrachloroethylene/PCE and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE	Region 9
Sweetwater Reservoir	

LOE ID:	1362
Pollutant:	Tetrachloroethylene/PCE

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE Sweetwater Reservoir

Region 9

LOE ID:	1361
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to

09/20/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE
Sweetwater Reservoir

Region 9

LOE ID: 1364

Pollutant: Tetrachloroethylene/PCE
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation: Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE
Sweetwater Reservoir

Region 9

LOE ID: 1366

Pollutant: Tetrachloroethylene/PCE
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE
Sweetwater Reservoir**

Region 9

LOE ID:	1365
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE
Sweetwater Reservoir**

Region 9

LOE ID:	1360
Pollutant:	Tetrachloroethylene/PCE

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE Sweetwater Reservoir

Region 9

LOE ID:	1359
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to

09/20/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 38041, Tetrachloroethylene/PCE
Sweetwater Reservoir**

Region 9

LOE ID: 1363

Pollutant: Tetrachloroethylene/PCE

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID 33477

Region 9

Sweetwater Reservoir

Pollutant: Thallium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollutant

Pollution:

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan water quality objective for thallium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 5 samples exceed the Basin Plan water quality objective for thallium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33477, Thallium

Region 9

Sweetwater Reservoir

LOE ID:	1459
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 02/1998 to 02/2000. None of the 5 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per day on 02/24/1998, 08/04/1998, 02/09/1999, 07/15/1999, and 02/24/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33075

Region 9

Sweetwater Reservoir

Pollutant:	Thiobencarb/Bolero
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 81 samples exceed the Basin Plan water quality objective for thiobencarb/bolero.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 81 samples exceed the Basin Plan water quality objective for thiobencarb/bolero and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Sweetwater Reservoir

Region 9

LOE ID:	1438
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Sweetwater Reservoir near the Vista del Lago station.

Temporal Representation:

Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Region 9

Sweetwater Reservoir

LOE ID: 1437

Pollutant: Thiobencarb/Bolero

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Sweetwater Reservoir near the pump tower.

Temporal Representation:

Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Region 9

Sweetwater Reservoir

LOE ID: 1444

Pollutant: Thiobencarb/Bolero

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 16

Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 07/1997 to 01/2001. None of the 16 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 01/2001. Samples were collected in 07/1997, 11/1997, on a quarterly basis from 1998-2000, and in 01/2001. Samples were collected once per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Region 9

Sweetwater Reservoir

LOE ID:	1443
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Region 9

Sweetwater Reservoir

LOE ID:	1442
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 6 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Region 9

Sweetwater Reservoir

LOE ID:	1441
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Region 9

Sweetwater Reservoir

LOE ID: 1439

Pollutant: Thiobencarb/Bolero
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:
QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33075, Thiobencarb/Bolero

Region 9

Sweetwater Reservoir

LOE ID: 1440

Pollutant: Thiobencarb/Bolero
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 10

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33224	Region 9
Sweetwater Reservoir		

Pollutant:	Toluene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for toluene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 70 samples exceed the Basin Plan water quality objective for toluene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33224, Toluene**Region 9****Sweetwater Reservoir**

LOE ID:	1372
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33224, Toluene**Region 9****Sweetwater Reservoir**

LOE ID:	1367
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.

Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33224, Toluene	Region 9
Sweetwater Reservoir	

LOE ID:	1368
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33224, Toluene	Region 9
Sweetwater Reservoir	

LOE ID:	1369
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33224, Toluene

Region 9

Sweetwater Reservoir

LOE ID:	1370
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33224, Toluene**Region 9****Sweetwater Reservoir**

LOE ID:	1373
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33224, Toluene**Region 9****Sweetwater Reservoir**

LOE ID:	1374
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference: Toluene is 0.15 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation: Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33224, Toluene
Sweetwater Reservoir

Region 9

LOE ID: 1371

Pollutant: Toluene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study
QAPP Information Reference(s):

DECISION ID 33032
Sweetwater Reservoir

Region 9

Pollutant: Total Dissolved Solids
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Six of 8 samples exceed the Basin Plan water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 8 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.</p>

Line of Evidence (LOE) for Decision ID 33032, Total Dissolved Solids		Region 9
Sweetwater Reservoir		
LOE ID:	1462	
Pollutant:	Total Dissolved Solids	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	8	
Number of Exceedances:	6	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	<p>Data were collected by RWQCB9 from 07/1997 to 11/2000. Six of 8 samples were in exceedance. At the October 25th Water Board meeting, comments were received concerning total dissolved solids in terminal reservoirs in the San Diego region. The Board concluded that it was inappropriate to list these water bodies based on secondary MCLs when the TDS values of the incoming supplying waters were higher than the MCLs. Narrative standards are therefore met.</p>	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		

Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 07/1997 to 11/2000 once per day on 8 days during this time span. Samples were collected mostly during the winter and summer months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33459	Region 9
Sweetwater Reservoir		

Pollutant:	Trichloroethylene/TCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for trichloroethylene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceed the Basin Plan water quality objective for trichloroethylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE	Region 9
Sweetwater Reservoir	

LOE ID:	1378
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE

Region 9

Sweetwater Reservoir

LOE ID:	1379
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE

Region 9

Sweetwater Reservoir

LOE ID:	1380
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE
Sweetwater Reservoir

Region 9

LOE ID:	1375
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE

Region 9

Sweetwater Reservoir

LOE ID:	1382
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE

Region 9

Sweetwater Reservoir

LOE ID:	1381
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE

Region 9

Sweetwater Reservoir

LOE ID:	1377
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33459, Trichloroethylene/TCE

Region 9

Sweetwater Reservoir

LOE ID:	1376
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33472	Region 9
Sweetwater Reservoir		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Vinyl chloride Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceeded the Basin Plan water quality objective for vinyl chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 70 samples exceeded the Basin Plan water quality objective for vinyl chloride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride

Region 9

Sweetwater Reservoir

LOE ID:	1388
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride

Region 9

Sweetwater Reservoir

LOE ID:	1387
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride

Region 9

Sweetwater Reservoir

LOE ID:	1386
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride

Region 9

Sweetwater Reservoir

LOE ID:	1385
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride

Region 9

Sweetwater Reservoir

LOE ID:	1384
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride

Region 9

Sweetwater Reservoir

LOE ID: 1383

Pollutant: Vinyl chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:
QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride

Region 9

Sweetwater Reservoir

LOE ID: 1389

Pollutant: Vinyl chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33472, Vinyl chloride
Sweetwater Reservoir

Region 9

LOE ID:	1390
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Vinyl Chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32662

Region 9

Sweetwater Reservoir

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the Basin Plan objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 4 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32662, Zinc

Region 9

Sweetwater Reservoir

LOE ID:	1460
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB 9 from 12/1997 to 02/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation: Samples were collected once per day on 12/15/1997, 06/17/1998, 07/15/1999, and 02/24/2000.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33323	Region 9
Sweetwater Reservoir		

Pollutant: cis-1,2-Dichloroethylene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for cis-1,2-dichloroethylene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceed the Basin Plan water quality objective for cis-1,2-dichloroethylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene	Region 9
Sweetwater Reservoir	

LOE ID: 1304

Pollutant: cis-1,2-Dichloroethylene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene

Region 9

Sweetwater Reservoir

LOE ID:	1303
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene**Region 9****Sweetwater Reservoir**

LOE ID:	1309
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene**Region 9****Sweetwater Reservoir**

LOE ID:	1306
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.

Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene	Region 9
Sweetwater Reservoir	

LOE ID:	1305
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene	Region 9
Sweetwater Reservoir	

LOE ID:	1308
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene

Region 9

Sweetwater Reservoir

LOE ID:	1307
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33323, cis-1,2-Dichloroethylene
Sweetwater Reservoir**

Region 9

LOE ID:	1310
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB 9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33087

Region 9

Sweetwater Reservoir

Pollutant:	meta-para xylenes
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for meta-para xylenes.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceed the Basin Plan water quality objective for meta-para xylenes and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes

Region 9

Sweetwater Reservoir

LOE ID:	1338
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes

Region 9

Sweetwater Reservoir

LOE ID:	1339
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes

Region 9

Sweetwater Reservoir

LOE ID:	1337
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes

Region 9

Sweetwater Reservoir

LOE ID: 1340

Pollutant: meta-para xylenes

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline: MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.

Guideline Reference: [Placeholder reference 2006 303\(d\)](#)

Spatial Representation: Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.

Temporal Representation: Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes

Region 9

Sweetwater Reservoir

LOE ID: 1341

Pollutant: meta-para xylenes

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes
Sweetwater Reservoir

Region 9

LOE ID:	1336
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes**Region 9****Sweetwater Reservoir**

LOE ID:	1335
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33087, meta-para xylenes**Region 9****Sweetwater Reservoir**

LOE ID:	1342
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB 9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	38290	Region 9
Sweetwater Reservoir		

Pollutant:	o-Dichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Seven lines of evidence are available in the administrative record to assess this pollutant. None of the 66 samples exceed the Basin Plan water quality objective for o-Dichlorobenzene; all were 'non-detects'.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 66 samples exceed the Basin Plan water quality objective for o-Dichlorobenzene; (all were 'non-detects'), and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 38290, o-Dichlorobenzene	Region 9
Sweetwater Reservoir	

LOE ID: 1286

Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38290, o-Dichlorobenzene
Sweetwater Reservoir

Region 9

LOE ID:	1280
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38290, o-Dichlorobenzene

Region 9

Sweetwater Reservoir

LOE ID:	1281
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38290, o-Dichlorobenzene

Region 9

Sweetwater Reservoir

LOE ID:	1282
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38290, o-Dichlorobenzene

Region 9

Sweetwater Reservoir

LOE ID:	1283
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38290, o-Dichlorobenzene

Region 9

Sweetwater Reservoir

LOE ID:	1284
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38290, o-Dichlorobenzene
Sweetwater Reservoir

Region 9

LOE ID:	1285
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	44545	Region 9
Sweetwater Reservoir		

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for o-xylene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 70 samples exceed the Basin Plan water quality objective for o-xylene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44545, o-Xylene	Region 9
Sweetwater Reservoir	

LOE ID:	1350
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB 9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance. The sum of the 4 samples did not exceed 1.750 mg/L (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44545, o-Xylene

Region 9

Sweetwater Reservoir

LOE ID:	1343
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.

Line of Evidence (LOE) for Decision ID 44545, o-Xylene**Region 9****Sweetwater Reservoir**

LOE ID:	1344
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44545, o-Xylene**Region 9****Sweetwater Reservoir**

LOE ID:	1345
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44545, o-Xylene
Sweetwater Reservoir

Region 9

LOE ID:	1346
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44545, o-Xylene
Sweetwater Reservoir

Region 9

LOE ID:	1347
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44545, o-Xylene

Region 9

Sweetwater Reservoir

LOE ID:	1348
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44545, o-Xylene
Sweetwater Reservoir

Region 9

LOE ID:	1349
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID 32729
Sweetwater Reservoir

Region 9

Pollutant:	p-Dichlorobenzene (DCB)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 70 samples exceed the Basin Plan water quality objective for p-Dichlorobenzene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 70 samples exceed the Basin Plan water quality objective for p-Dichlorobenzene and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID:	1277
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 7 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the east end reservoir fill boundary.
Temporal Representation:	Samples were collected once per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID:	1279
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 08/1998, 08/1999, 09/2000, and 10/2000. None of the 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected on 08/11/1998, 08/24/1999, 09/5/2000, 10/04/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID:	1276
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 8 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the minimum pool boundary east.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID:	1275
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 10 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID:	1274
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of the minimum pool.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID:	1273
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12//1999.
Environmental Conditions:	

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID: 1278

Pollutant: p-Dichlorobenzene (DCB)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 07/12/1999.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32729, p-Dichlorobenzene (DCB)

Region 9

Sweetwater Reservoir

LOE ID: 1272

Pollutant: p-Dichlorobenzene (DCB)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 13

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 13 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/09/1998 to 09/20/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33018	Region 9
Sweetwater Reservoir		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. Forty-nine of 456 samples exceed the Basin Plan water quality objective for pH.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-nine of 456 samples exceed the Basin Plan water quality objective for pH and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33018, pH	Region 9
Sweetwater Reservoir	

LOE ID:	1461
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB 9 from 07/1997 to 11/2000. None of the 8 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir. Exact location was no reported.
Temporal Representation:	Samples were collected from 07/1997 to 11/2000. Samples were collected once per day on 8 days during this time span. Samples were collected mostly in the winter and summer months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33018, pH

Region 9

Sweetwater Reservoir

LOE ID:	1226
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS on one day every other month for 10 months. Six of 58 samples were in exceedance of the maximum standard. No samples were below the minimum standard (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near Vista del Lago station at depths of

Temporal Representation: 0.1-12.0 meters.
Samples were collected on one day every other month for 10 months from 09/10/1998 to 07/12/1999. There were 11-12 samples collected per day.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Report.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33018, pH

Region 9

Sweetwater Reservoir

LOE ID: 1231

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 57
Number of Exceedances: 6

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the USGS on one day every other month for 10 months. Samples were not collected in 11/1998. There were 57 samples were collected, 6 were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond at depths of 0.1 to 13.3 meters.

Temporal Representation: Samples were collected on one day every other month for 10 months from 09/10/1998 to 07/12/1999. 5-15 samples were collected per sampling day.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33018, pH

Region 9

Sweetwater Reservoir

LOE ID: 1230

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27
Number of Exceedances: 8

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS on one day every other month for a year. Samples were not collected in 11/1998. There were 27 samples were collected, 8 were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir east end reservoir fill boundary at depths of 0.1 to 5.7 meters.
Temporal Representation:	Samples were collected on one day every other month for a year from 09/10/1998 to 09/20/1999. 2-7 samples were collected per sampling day.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33018, pH

Region 9

Sweetwater Reservoir

LOE ID:	1229
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	67
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS on one day every other month for 10 months. Samples were not collected in 11/1998. There were 67 samples were collected, 11 were in exceedance of the maximum standard.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir minimum pool boundary East at depths of 0.1 to 13.5 meters.
Temporal Representation:	Samples were collected on one day every other month for 10 months from 09/10/1998 to 07/12/1999. Approximately 15 samples were collected per sampling day.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.

Line of Evidence (LOE) for Decision ID 33018, pH**Region 9****Sweetwater Reservoir**

LOE ID:	1228
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	73
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS on one day every other month for 10 months. Samples were not collected in 11/1998. There were 73 samples were collected, 5 were above the maximum standard (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the recreation area at depths of 0.1 to 16.0 meters.
Temporal Representation:	Samples were collected on one day every other month for 10 months from 09/10/1998 to 07/12/1999. 10-16 samples were collected on each sampling day.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used by USGS in Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33018, pH**Region 9****Sweetwater Reservoir**

LOE ID:	1227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	96
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS on one day every other month for a year. Samples were not collected in 11/1998. 96 samples were collected, 9 were in exceedance of the maximum standard (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir at the center of minimum pool at depths ranging from 0.1 to 17.0 meters.
Temporal Representation:	Samples were collected on one day every other month for a year from 09/09/1998 to 09/20/1999. Approximately 15 samples were collected per sample day.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data used in USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33018, pH

Region 9

Sweetwater Reservoir

LOE ID:	1225
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	70
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by USGS on one day every other month for a year. Of 70 samples, 4 were in exceedance of the maximum standard (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir near the pump tower. Samples were collected at depths of 0.1 to 16.5 meters.
Temporal Representation:	Samples were collected on one day every other month for a year from 09/09/1998 to 09/20/1999. Five to 20 samples were collected per sampling day. Samples were not collected in November 1998.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID

33235

Region 9

Sweetwater Reservoir

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. There were 324 out of 552 samples that exceeded the Basin Plan water quality objective for dissolved oxygen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. There were 324 out of 552 samples that exceeded the Basin Plan water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved Sweetwater Reservoir

Region 9

LOE ID:	1219
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	68
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by USGS from 09/1998 to 07/1999. All samples collected in 1998 were below the minimum standard. Samples collected in 1999 all met the standard within at least the top 3 m, but DO measurements decreased to below the minimum standard as the sample depth increased. Overall, with samples at all depths included, 41 of 68 samples were below the minimum standard. All samples that met the standard were within the top 5 m (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland

surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Sweetwater Reservoir near Vista del Lago Station at depths from 0.1 to 12.0 meters.

Temporal Representation:

Samples were collected once every other month from 09/10/1998 to 07/12/1999. Multiple (10-15) samples were collected per day.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> is from a USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved
Sweetwater Reservoir**

Region 9

LOE ID: 1220

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 112
Number of Exceedances: 72

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the USGS one day every other month for a year. For all sampling days , except 11/3/1998, at least the top 3 meters of sample depth showed DO samples above the minimum standard. For all sampling days, DO concentration declined as the sample depth increased. Overall, with all sample depths included, 72 of 112 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Sweetwater Reservoir at the center of minimum pool. Samples were collected at depths of 0.1-17.0 meters.

Temporal Representation:

Samples were collected on one day every other month for a year from 09/09/1998 to 09/20/1999. There were 15-20 samples collected per day.

Environmental Conditions:

QAPP Information:

USGS: <http://water.usgs.gov/owq/FieldManual/Data> is from a USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved

Region 9

Sweetwater Reservoir

LOE ID:	1222
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	80
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS on one day every other month for 10 months. All samples, except those collected on 11/0/1998 showed that at shallower depths, the DO concentrations were above the minimum standard. All samples collected on 11/03/1998 were below the minimum standard. All sampling days showed that as depth increased, the DO concentration decreased. Samples collected in September and July showed more dramatic decreases in DO concentration as the depth increased. Overall, with all sampling depths included, 46 of 80 samples were below the minimum standard (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sweetwater Reservoir minimum pool boundary East. Samples were collected at depths of 0.1 to 13.5 meters.
Temporal Representation:	Samples were collected on one day every other month for 10 months from 09/10/1998 to 07/12/1999. Approximately 12 samples were collected per sampling day.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved

Region 9

Sweetwater Reservoir

LOE ID:	1218
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS once every two months for a year. At this location, all samples from 09/1998, 11/1998, and 09/1999 were at or below the standard. Samples

collected in 01/1999, 03/1999, 05/1999, and 07/1999 showed DO levels above the standard at depths of less than 5 m. January samples showed DO levels meeting the WQO from 0.1 to 13.6 meters deep. In some cases, at depths deeper than 5.0 m, there is a more dramatic drop in DO. Overall, with samples at all depths included, 54 of 86 were below the minimum standard for dissolved oxygen (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with all beneficial uses except From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near the pump tower at depths ranging from 0.1-16.0 m.

Temporal Representation: Samples were collected once every 2 months from 09/09/1998 to 09/20/1999. 5-20 samples were collected per day.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved Sweetwater Reservoir

Region 9

LOE ID: 1216

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by Sweetwater Authority from 07/2000 to 06/2001. At a depth of 0 ft., none of the 6 samples were below the standard. At 5 ft., 2 of 6 samples were below the standard, and at 10 ft., one of 6 samples were below the standard (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/L in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/L in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/L more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Lake at the Log Boom.
Temporal Representation: Samples were collected 07/18/2000 to 06/20/2001. Samples were collected a total of 6

times, 3 in 2000 and 3 in 2001. Multiple seasons are represented.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved
Sweetwater Reservoir**

Region 9

LOE ID: 1217

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by Sweetwater Authority from 07/2000 to 06/2001. At a depth of 0 ft., 0 of 6 samples were below the standard. At 5 ft. in depth, one of 6 samples were below the standard, and at 10 ft. down, one of 6 samples was below the standard (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Lake at the Intake Tower.

Temporal Representation: Samples were collected 07/18/2000 to 06/20/2001. Samples were collected a total of 6 times, 3 in 2000 and 3 in 2001. Multiple seasons are represented.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved
Sweetwater Reservoir**

Region 9

LOE ID: 1223

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 31

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the USGS on one day every other month for a year. The samples

collected in this set all met the standard except for those collected on 11/03/1998. Also, in 09/1998, as sample depth increased, the DO concentration decreased to below the minimum standard. This is the only sampling day on which there is an obvious trend that DO concentration decreases as depth increases. For other sampling days, samples were not collected at depths deeper than 5.7 meters, making it difficult to see an obvious trend of a decrease in DO concentration with an increase in sampling depth. Overall, with all sample depths included, 7 of 31 samples were below the minimum standard (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir east end reservoir fill boundary. Samples were collected at depths of 0.1-5.7 meters.

Temporal Representation: Samples were collected on one day every other month for a year from 09/10/1998 to 09/20/1999. Approximately 5 samples were collected per sampling day.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> used in USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved Sweetwater Reservoir

Region 9

LOE ID: 1224

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 70
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the USGS on one day every other month for 10 months. All samples collected in 1998 were below the minimum standard. Samples collected in 1999 met the standards at sampling depths of at least 3m and shallower (often samples at 5 and 6 m still met standards), but showed a decrease in DO concentration to below the minimum standard as the sample depth increased. Overall, with all sampling depths included, 40 of 70 samples were below the minimum WQO (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/L in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/L in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/L more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near Gum Tree Cove Pond. Samples were collected at depths of 0.1-13.0 meters.

Temporal Representation: Samples were collected on one day every other month for 10 months from 09/10/1998 to 07/12/1999. 12-15 samples were collected per sampling day.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33235, Oxygen, Dissolved
Sweetwater Reservoir**

Region 9

LOE ID: 1221

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 87

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the USGS on one day every other month for 10 months. No samples collected in 1998 were above the minimum standard. Samples collected in 1999 showed that at shallower sample depths, DO levels met the standard, but that as depth increased, DO levels decreased. Overall, with all sample depths included, 59 of 87 samples were below the minimum standard (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Sweetwater Reservoir near the recreation area. Samples were collected at depths of 0.1 to 16.0 meters.

Temporal Representation: Samples were collected one day per month, every other month from 09/10/1998 to 07/12/1999. There were 10-17 samples collected per sampling day.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Loveland Reservoir](#)
Water Body ID: CAL9093100020011025093606
Water Body Type: Lake & Reservoir

DECISION ID	33045	Region 9
Loveland Reservoir		

Pollutant: Aluminum
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. 2 of the 4 samples exceed the objective for the protection of the MUN beneficial use. One of 8 samples exceed the objective for the protection of the Aquatic Life Beneficial Use

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 4 samples exceed the OBJECTIVE for MUN and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. One of Eight samples exceed the WARM beneficial use which is insufficient to determine beneficial use support using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33045, Aluminum	Region 9
Loveland Reservoir	

LOE ID: 1529
Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority from 1997 to 2000, with one sample being collected per year. Two of the 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample was collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33045, Aluminum

Region 9

Loveland Reservoir

LOE ID:	74253
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the eight samples tested for aluminum exceeded the numeric criteria of 0.087 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect aquatic organisms from chronic exposures (expressed as 4-day average concentration) in freshwater. The numeric criteria for aluminum is 0.087 mg/L. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	

QAPP Information:

Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	33046	Region 9
Loveland Reservoir		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 33046, Antimony	Region 9
Loveland Reservoir	

LOE ID:	1530
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Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
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Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance. (SWRCB, 2003).

Data Reference:	Placeholder reference 2006 303(d)
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SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	One sample was collected in 07/1999 and one sample was collected in 02/2000. One sample was collected per year, giving a total of 2 samples.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33046, Antimony
Loveland Reservoir**

Region 9

LOE ID:	74254
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The reporting limits for the eight non-detect samples were greater than the MCL, therefore these data could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for antimony is 6 ug/L.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

**DECISION ID
Loveland Reservoir**

33205

Region 9

Pollutant: Arsenic

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Revised
Pollution

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples exceed the OBJECTIVE for protection of the MUN beneficial use. Zero of eight samples exceed the objectives for the protection of the Aquatic Life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 and Zero of eight samples exceeded the OBJECTIVES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33205, Arsenic

Region 9

Loveland Reservoir

LOE ID:	1531
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per year in 1999 and 2000, in 07/1999 and 02/2000. A total of 2 samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33205, Arsenic

Region 9

Loveland Reservoir

LOE ID:	74239
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for Arsenic exceeded the CTR criteria of 0.15 mg/L.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule lists criterion continuous concentrations (expressed as a 4-day average) for arsenic to protect aquatic life in freshwater. The CTR criteria for arsenic is 0.15 mg/L. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33205, Arsenic

Region 9

Loveland Reservoir

LOE ID:	74240
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Both detected results were below the MCL. The reporting limits for the six non-detect samples were greater than the PHG, therefore these data could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the water quality objective base on the California primary maximum contaminant level (MCL) for Arsenic is 0.05 mg/L.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin Public Health Goal for Arsenic in Drinking Water
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	33047	Region 9
Loveland Reservoir		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 12 samples exceed the OBJECTIVE for protection of the MUN beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 12 samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33047, Barium

Region 9

Loveland Reservoir

LOE ID:	1532
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority from 1997 to 2000. None of the 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all water with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 1997 to 2000. One sample was collected per year in 12/1997, 06/1998, 07/1999, and 02/2000. A total of 4 samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33047, Barium

Region 9

Loveland Reservoir

LOE ID:	74241
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceeded the MCL.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for barium is 1,000 ug/L.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	33357	Region 9
Loveland Reservoir		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 10 samples exceed the OBJECTIVE for protection of the MUN beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 10 samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33357, Beryllium	Region 9
Loveland Reservoir	

LOE ID:	1533
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Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not recorded.
Temporal Representation:	Samples were collected in 07/1999 and 02/2000. One sample was collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33357, Beryllium

Region 9

Loveland Reservoir

LOE ID:	74242
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceeded the MCL.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level(MCL) thought to be protective of drinking water for beryllium is 4 ug/L.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.

Environmental Conditions:

QAPP Information:

Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	44020	Region 9
Loveland Reservoir		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 10 samples exceed the OBJECTIVE for protection of the MUN beneficial use. Zero of eight samples exceed the objectives for the protection of the Aquatic Life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 10 and Zero of eight samples exceeded the OBJECTIVES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 44020, Cadmium	Region 9
Loveland Reservoir	

LOE ID:	1534
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 07/1999 and 02/2000. One sample per year was collected, giving a total of 2 samples.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44020, Cadmium

Region 9

Loveland Reservoir

LOE ID:	74243
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for Cadmium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of

drinking water.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44020, Cadmium

Region 9

Loveland Reservoir

LOE ID: 74244

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8

Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality: The 8 non detect samples had a detection limit below the objective and therefore meet the objective.

Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Total cadmium levels should not exceed the California Department of Public Health Primary MCL of .005 mg/l in inland surface waters designated with the MUN beneficial use.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.

Temporal Representation: From 2006-2009, samples were collected biannually during the months of January and June/July.

Environmental Conditions:

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID

33295

Region 9

Loveland Reservoir

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 10 samples exceed the OBJECTIVE for protection of the MUN beneficial use. Zero of eight samples exceed the objectives for the protection of the Aquatic Life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 10 and Zero of eight samples exceeded the OBJECTIVES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33295, Chromium

Region 9

Loveland Reservoir

LOE ID:	1535
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For waters with a municipal beneficial use, the WQO for total chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected once per year in 07/1999 and 02/2000. A total of 2 samples were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33295, Chromium

Region 9

Loveland Reservoir

LOE ID:	74245
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Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceeded the MCL.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for chromium, total is 50 ug/L.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33295, Chromium

Region 9

Loveland Reservoir

LOE ID:	74246
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for Chromium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies

Guideline Reference: based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.

Temporal Representation: From 2006-2009, samples were collected biannually during the months of January and June/July.

Environmental Conditions:

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	32730	Region 9
Loveland Reservoir		

Pollutant: Copper

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples exceed the OBJECTIVE for protection of the MUN beneficial use. Zero of seven samples exceed the objectives for the protection of the Aquatic Life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 and Zero of seven samples exceeded the OBJECTIVES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32730, Copper	Region 9
Loveland Reservoir	

LOE ID: 74247

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples tested for Copper exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32730, Copper

Region 9

Loveland Reservoir

LOE ID:	1536
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Samples were collected by Sweetwater Authority once per year from 1997 to 2000. None of the 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Loveland Reservoir. Exact location was not reported.
Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample was collected per year, giving a total of 4 samples.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	47881	Region 9
Loveland Reservoir		

Pollutant:	Cyanide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERION and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47881, Cyanide	Region 9
Loveland Reservoir	

LOE ID:	74248
Pollutant:	Cyanide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All seven samples were reported as non-detect. The reporting limits were larger than the criteria of 5.2 ug/L used to assess water quality.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Toxics Rule lists criterion continuous concentrations (expressed as a 4-day average) for cyanide to protect aquatic life in freshwater. The criteria for cyanide is 5.2 ug/L. ref2557
Guideline Reference:	Staff Report Regarding Russian River Bacterial Water Quality Monitoring in the Vicinity of Fitch Mountain Sonoma County, California. April through September, 1995. North Coast Regional Water Quality Control Board
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	47887	Region 9
Loveland Reservoir		
Pollutant:	Indicator Bacteria	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 and 3.3 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 201 samples exceed the OBJECTIVE for e.coli and zero of the 175 samples exceed the objective for total coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 201 samples and zero of 175 exceeded the objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47887, Indicator Bacteria

Region 9

Loveland Reservoir

LOE ID: 74249

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 201
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 201 samples exceeded the E. coli objective of 235/100 ml.
Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Escherichia coli concentration shall not exceed 235/100ml.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected on Lake Loveland 600 feet east of Loveland Dam.
Temporal Representation: Samples were collected from January 2006 to December 2009.
Environmental Conditions:
QAPP Information: Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47887, Indicator Bacteria

Region 9

Loveland Reservoir

LOE ID: 74263

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 175
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of 175 samples exceeded the total coliform objective of 10,000/100 ml. There are 203 sample results in this data set but 28 of those samples could not be compared to the objective because detection limit was not adequate. These 28 samples may not be meeting the objective since the result was reported as >2419.6.
Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total coliform shall not exceed 10,000/100ml. Guidance for Fresh Water Beaches CDPH, 2006. ref 2531
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Samples were collected on Lake Loveland 600 feet east of Loveland Dam.
Temporal Representation:	Samples were collected from January 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	Sampling was conducted under the Sweetwater Authority Water Quality Monitoring Plan and analysis under the Sweetwater Authority Laboratory QA Manual.
QAPP Information Reference(s):	

DECISION ID	33381	Region 9
Loveland Reservoir		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of four samples exceed the OBJECTIVE for protection of the MUN beneficial use. Zero of eight samples exceed the objectives for the protection of the Aquatic Life beneficial uses.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 4 and Zero of eight samples exceeded the OBJECTIVES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33381, Iron	Region 9
Loveland Reservoir	

LOE ID: 74250

Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for iron exceeded the numeric criteria of 1 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. The numeric criteria for iron is 1 mg/L. Ref16
Guideline Reference:	National recommended water quality criteria: 2002. EPA-822-R-02-047 Washington, D.C. USEPA
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33381, Iron
Loveland Reservoir

Region 9

LOE ID:	1537
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority once per year from 1997 to 2000. One of the 4 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation: Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample was collected each year.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	47891	Region 9
Loveland Reservoir		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERION and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47891, Lead	Region 9
Loveland Reservoir	

LOE ID:	74251
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for Lead exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47891, Lead

Region 9

Loveland Reservoir

LOE ID:	74252
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The reporting limits for the eight non-detect samples were greater than the PHG, therefore these data could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Office of Environmental Hazard and Heath Assessment, Public Health Goal (PHG) for lead is 0.2 ug/L.
Guideline Reference:	Public Health Goal for Lead in Drinking Water
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and

June/July.

Environmental Conditions:

QAPP Information:

Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	44409	Region 9
Loveland Reservoir		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of two samples exceed the OBJECTIVE for protection of the MUN beneficial use. Zero of seven samples exceed the objectives for the protection of the Aquatic Life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 and Zero of seven samples exceeded the OBJECTIVES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 44409, Mercury	Region 9
Loveland Reservoir	

LOE ID:	74255
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for mercury exceeded the numeric criteria of 0.77 ug/L, promulgated to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. Criterion derived from data for inorganic mercury (II), but is applied to total mercury. It will probably be underprotective if a substantial portion of mercury in the water column is methylmercury. Derivation of criterion did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels. The numeric criteria for mercury is 0.77 ug/L. ref13
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44409, Mercury

Region 9

Loveland Reservoir

LOE ID:	1539
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.

Temporal Representation: Samples were collected in 07/1999 and 02/2000. One sample was collected per year.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44409, Mercury
Loveland Reservoir

Region 9

LOE ID: 74256

Pollutant: Mercury
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: The reporting limits for the eight non-detect samples were greater than the criteria, therefore these data could not be used in this assessment.
Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: National Toxics Rule criteria to protect human health exposure to elemental mercury is 0.05 ug/L.
Guideline Reference: [National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology](#)

Spatial Representation: Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation: From 2006-2009, samples were collected biannually during the months of January and June/July.

Environmental Conditions:
QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID 33383
Loveland Reservoir

Region 9

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of two samples exceed the OBJECTIVE for protection of the MUN beneficial use. Zero of eight samples exceed the objectives for the protection of the Aquatic Life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 and Zero of eight samples exceeded the OBJECTIVES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33383, Nickel
Loveland Reservoir**

Region 9

LOE ID:	1540
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 07/1999 and 02/2000. One sample was collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33383, Nickel
Loveland Reservoir**

Region 9

LOE ID:	74257
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for Nickel exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	47892	Region 9
Loveland Reservoir		

Pollutant:	Nitrogen, Nitrate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples exceeded the CRITERION and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47892, Nitrogen, Nitrate

Region 9

Loveland Reservoir

LOE ID:	74258
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	0 of 8 samples exceed the objective for nitrate (as N) at 10 mg/L. 4 of the 8 samples are reported as non-detects. These non-detects are less than or equal to the water quality standard, the value will be considered as meeting the water quality standard, objective, criterion, or evaluation guideline.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (2011): Waters designated for MUN shall not contain concentrations of chemical constituents in excess of the MCL specified in Title 22 of the California Code of Regulations. The nitrate (as N) MCL is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected at Lake Loveland.
Temporal Representation:	Samples were collected biannually from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data was submitted with an unsigned water quality monitoring plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47892, Nitrogen, Nitrate

Region 9

Loveland Reservoir

LOE ID:	74259
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight samples were collected with no samples detecting nitrite as N. It cannot be determined whether the reporting limit was below the water quality objective therefore it cannot be determined whether the samples met the water quality standards.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, San Diego Basin, Objective for Municipal and Domestic Supply uses of inland surface waters states the following: waters shall not contain concentrations of inorganic chemicals in excess of the limits specified in California Code of Regulations, Title 22, Table 64431-A of section 64431 (Inorganic Chemicals). The maximum contaminant level listed in Table 64431-A for Nitrite as N is 1.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lake Loveland.
Temporal Representation:	Samples were collected biannually from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data was submitted with an unsigned water quality monitoring plan.
QAPP Information Reference(s):	

DECISION ID	33378	Region 9
Loveland Reservoir		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION for protection of the aquatic life beneficial use. Zero of two samples exceed the criterion for protection of the MUN beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples and zero of 2 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33378, Selenium

Region 9

Loveland Reservoir

LOE ID:	74260
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for Selenium exceeded the CTR criteria of 0.005 mg/L.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The CTR criteria for selenium is 0.005 mg/L. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33378, Selenium

Region 9

Loveland Reservoir

LOE ID:	1541
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 07/1999 and 02/2000. One sample was collected each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32665	Region 9
Loveland Reservoir		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION for protection of the aquatic life beneficial use. Zero of four samples exceed the criterion for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples and zero of 4 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 32665, Silver**Region 9****Loveland Reservoir**

LOE ID:	1542
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Sweetwater Authority from 1997 to 2000. None of the 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample was collected each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32665, Silver**Region 9****Loveland Reservoir**

LOE ID:	74261
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All eight samples were reported as non-detect. The reporting limits were larger than the criteria used to assess water quality.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID 32666 Region 9	
Loveland Reservoir	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Thallium Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 9 samples exceeded the CRITERION and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32666, Thallium Region 9	
Loveland Reservoir	

LOE ID: 1543

Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority in 1999 and 2000. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 07/1999 and 02/2000. One sample was collected each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32666, Thallium

Region 9

Loveland Reservoir

LOE ID:	74262
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceeded the MCL. The reporting limits for one of the non-detect samples was greater than the MCL, therefore this data could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for thallium is 2 ug/L.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.

Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	32709	Region 9
Loveland Reservoir		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION for protection of the aquatic life beneficial use. Zero of four samples exceed the criterion for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples and zero of 4 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 32709, Zinc	Region 9
Loveland Reservoir	

LOE ID:	74264
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for Zinc exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Loveland Reservoir at approximately 32.782N/ -116.79W.
Temporal Representation:	From 2006-2009, samples were collected biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32709, Zinc

Region 9

Loveland Reservoir

LOE ID:	1544
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority from 1997 to 2000. None of the 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample was collected each year.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	33151	Region 9
Loveland Reservoir		

Pollutant: 1,1,1-Trichloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33151, 1,1,1-Trichloroethane	Region 9
Loveland Reservoir	

LOE ID: 1476

Pollutant: 1,1,1-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.

Environmental Conditions:
QAPP Information:

USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33151, 1,1,1-Trichloroethane
Loveland Reservoir

Region 9

LOE ID: 1475

Pollutant: 1,1,1-Trichloroethane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,1-Trichloroethane is 0.200 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Loveland Reservoir near dam site 1.
Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.

Environmental Conditions:
QAPP Information:

USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID 33465
Loveland Reservoir

Region 9

Pollutant: 1,1,2,2-Tetrachloroethane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33465, 1,1,2,2-Tetrachloroethane	Region 9
Loveland Reservoir	

LOE ID:	1496
Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33465, 1,1,2,2-Tetrachloroethane	Region 9
Loveland Reservoir	

LOE ID:	1495
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Pollutant:	1,1,2,2-Tetrachloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2,2-Tetrachloroethane is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33216	Region 9
Loveland Reservoir		

Pollutant:	1,1,2-Trichloroethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not</p>

changed.

Line of Evidence (LOE) for Decision ID 33216, 1,1,2-Trichloroethane

Region 9

Loveland Reservoir

LOE ID:	1478
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. 0 of 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33216, 1,1,2-Trichloroethane

Region 9

Loveland Reservoir

LOE ID:	1477
Pollutant:	1,1,2-Trichloroethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1,2-Trichloroethane is 0.005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Loveland Reservoir near dam site 1.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.

Environmental Conditions:

QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID 33168		Region 9
Loveland Reservoir		
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>	

Line of Evidence (LOE) for Decision ID 33168, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride		Region 9
Loveland Reservoir		
LOE ID:	1479	
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	12	

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1-DCE is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33168, 1,1-Dichloroethylene (DCE)/ Vinylidene Chloride Loveland Reservoir

Region 9

LOE ID:	1480
Pollutant:	1,1-Dichloroethylene (DCE)/ Vinylidene Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,1-DCE is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Pollutant:	1,2,4-Trichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33219, 1,2,4-Trichlorobenzene	Region 9
Loveland Reservoir	

LOE ID:	1484
Pollutant:	1,2,4-Trichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.

Environmental Conditions:

QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33219, 1,2,4-Trichlorobenzene
Loveland Reservoir

Region 9

LOE ID: 1483

Pollutant: 1,2,4-Trichlorobenzene

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 1,2,4-Trichlorobenzene is 0.07 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Loveland Reservoir near dam site 1.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.

Environmental Conditions:

QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID 33169

Region 9

Loveland Reservoir

Pollutant: 1,2-Dichloroethylene,-trans

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33169, 1,2-Dichloroethylene,-trans
Loveland Reservoir**

Region 9

LOE ID:	1482
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2-Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33169, 1,2-Dichloroethylene,-trans
Loveland Reservoir**

Region 9

LOE ID:	1481
Pollutant:	1,2-Dichloroethylene,-trans
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for trans-1,2-Dichloroethylene is 0.01 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	32654	Region 9
Loveland Reservoir		

Pollutant:	Alachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32654, Alachlor	Region 9
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Loveland Reservoir

LOE ID:	1516
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32654, Alachlor

Region 9

Loveland Reservoir

LOE ID:	1515
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID	33509	Region 9
Loveland Reservoir		

Pollutant:	Atrazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33509, Atrazine	Region 9
Loveland Reservoir	

LOE ID:	1517
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in

Data Reference:	exceedance. (USGS, 2002). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33509, Atrazine

Region 9

Loveland Reservoir

LOE ID:	1518
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID

33279

Region 9

Loveland Reservoir

Pollutant:	Benzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33279, Benzene Loveland Reservoir

Region 9

LOE ID:	1489
Pollutant:	Benzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam, site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	

QAPP Information:

USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33279, Benzene

Region 9

Loveland Reservoir

LOE ID: 1490

Pollutant: Benzene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzene is 0.001 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID 33510

Region 9

Loveland Reservoir

Pollutant: Carbofuran
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33510, Carbofuran
Loveland Reservoir**

Region 9

LOE ID:	1519
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33510, Carbofuran
Loveland Reservoir**

Region 9

LOE ID:	1520
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	44021	Region 9
Loveland Reservoir		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of eight samples exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44021, Chloride**Region 9****Loveland Reservoir**

LOE ID:	1548
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority from 1997 to 2000. None of the 8 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 1997 to 2000. One to three samples were collected per year. Samples were collected during the winter and summer months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**33280****Region 9****Loveland Reservoir**

Pollutant:	Chlorobenzene (mono)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33280, Chlorobenzene (mono)

Region 9

Loveland Reservoir

LOE ID:	1491
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33280, Chlorobenzene (mono)

Region 9

Loveland Reservoir

LOE ID:	1492
Pollutant:	Chlorobenzene (mono)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlorobenzene (mono) is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33236	Region 9
Loveland Reservoir		

Pollutant:	Dichloromethane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33236, Dichloromethane	Region 9
Loveland Reservoir	

LOE ID:	1500
Pollutant:	Dichloromethane

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33236, Dichloromethane

Region 9

Loveland Reservoir

LOE ID:	1499
Pollutant:	Dichloromethane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dichloromethane is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam site 1.

Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33466	Region 9
Loveland Reservoir		

Pollutant:	Ethylbenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33466, Ethylbenzene	Region 9
Loveland Reservoir	

LOE ID:	1498
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33466, Ethylbenzene
Loveland Reservoir

Region 9

LOE ID:	1497
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID 33431
Loveland Reservoir

Region 9

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Objective for Fluoride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the Basin Plan Objective for Fluoride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33431, Fluoride
Loveland Reservoir

Region 9

LOE ID:	1547
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority from 1997 to 2000. None of the 8 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 1997 to 2000. One to three samples were collected per year.
Environmental Conditions:	Samples were collected during the winter and summer months.

DECISION ID	33511	Region 9
Loveland Reservoir		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33511, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Loveland Reservoir	

LOE ID: 1521

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33511, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Loveland Reservoir

LOE ID: 1522

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Lindane is 0.0002 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID 33487

Region 9

Loveland Reservoir

Pollutant: Molinate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollutant

Pollution:	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33487, Molinate		Region 9
Loveland Reservoir		
LOE ID:	1523	
Pollutant:	Molinate	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	12	
Number of Exceedances:	0	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.	
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.	
Environmental Conditions:		
QAPP Information:	USGS :http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.	
QAPP Information Reference(s):		
Line of Evidence (LOE) for Decision ID 33487, Molinate		Region 9
Loveland Reservoir		

LOE ID: 1524

Pollutant: Molinate
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
 Number of Exceedances: 0

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
 Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Molinate is 0.02 mg/L.
 Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
 Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.

Environmental Conditions:
 QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.
 QAPP Information Reference(s):

DECISION ID	32962	Region 9
Loveland Reservoir		

Pollutant: Simazine
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32962, Simazine
Loveland Reservoir**

Region 9

LOE ID:	1525
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 32962, Simazine
Loveland Reservoir**

Region 9

LOE ID:	1526
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 7 samples were in exceedance. (USGS, 2002).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33450	Region 9
Loveland Reservoir		

Pollutant:	Styrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33450, Styrene	Region 9
Loveland Reservoir	

LOE ID:	1505
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33450, Styrene
Loveland Reservoir

Region 9

LOE ID:	1506
Pollutant:	Styrene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Styrene is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	

DECISION ID	33350	Region 9
Loveland Reservoir		

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Water Quality Objective for sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the Basin Plan Objective for sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33350, Sulfates	Region 9
Loveland Reservoir	

LOE ID: 1549

Pollutant: Sulfates
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by Sweetwater Authority from 1997 to 2000. None of the 8 samples

Data Reference:	were in exceedance. Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 1997 to 2000. One to three samples were collected per year. Samples were collected during the winter and summer months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33451	Region 9
Loveland Reservoir		

Pollutant:	Tetrachloroethylene/PCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33451, Tetrachloroethylene/PCE	Region 9
Loveland Reservoir	

LOE ID:	1508
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33451, Tetrachloroethylene/PCE Loveland Reservoir

Region 9

LOE ID:	1507
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Tetrachloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	

QAPP Information:

USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID	33467	Region 9
Loveland Reservoir		

Pollutant: Thiobencarb/Bolero
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33467, Thiobencarb/Bolero	Region 9
Loveland Reservoir	

LOE ID: 1527

Pollutant: Thiobencarb/Bolero
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33467, Thiobencarb/Bolero
Loveland Reservoir

Region 9

LOE ID: 1528

Pollutant: Thiobencarb/Bolero
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thiobencarb is 0.07 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):

DECISION ID 44351
Loveland Reservoir

Region 9

Pollutant: Toluene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 44351, Toluene

Region 9

Loveland Reservoir

LOE ID:	1509
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44351, Toluene

Region 9

Loveland Reservoir

LOE ID:	1510
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33365	Region 9
Loveland Reservoir		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Objective for Total Dissolved Solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the Basin Plan Objective for Total Dissolved Solids, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33365, Total Dissolved Solids
Loveland Reservoir**

Region 9

LOE ID:	1546
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority from 1997 to 2000. None of the 8 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 1997 to 2000. One to three samples were collected per year. Samples were collected during the winter and summer months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33291
Loveland Reservoir**

Region 9

Pollutant:	Trichloroethylene/TCE
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33291, Trichloroethylene/TCE		Region 9
Loveland Reservoir		
LOE ID:	1511	
Pollutant:	Trichloroethylene/TCE	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	12	
Number of Exceedances:	0	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.	
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.	
Environmental Conditions:		
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.	
QAPP Information Reference(s):		

Line of Evidence (LOE) for Decision ID 33291, Trichloroethylene/TCE		Region 9
Loveland Reservoir		

LOE ID:	1512
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Trichloroethylene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33292	Region 9
Loveland Reservoir		

Pollutant:	Vinyl chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan objective, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33292, Vinyl chloride
Loveland Reservoir**

Region 9

LOE ID:	1514
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for vinyl chloride is 0.0005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33292, Vinyl chloride
Loveland Reservoir**

Region 9

LOE ID:	1513
Pollutant:	Vinyl chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for vinyl chloride is 0.0005 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Loveland Reservoir near the dam site 1.

Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID	33328	Region 9
Loveland Reservoir		

Pollutant: cis-1,2-Dichloroethylene

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33328, cis-1,2-Dichloroethylene	Region 9
Loveland Reservoir	

LOE ID: 1493

Pollutant: cis-1,2-Dichloroethylene

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam, site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33328, cis-1,2-Dichloroethylene
Loveland Reservoir

Region 9

LOE ID:	1494
Pollutant:	cis-1,2-Dichloroethylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cis-1,2-Dichloroethylene is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.

DECISION ID	43035	Region 9
Loveland Reservoir		

Pollutant: meta-para xylenes
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

 Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

 This conclusion is based on the staff findings that:
 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43035, meta-para xylenes	Region 9
Loveland Reservoir	

LOE ID: 1502

Pollutant: meta-para xylenes
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline: MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are

	prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43035, meta-para xylenes
Loveland Reservoir

Region 9

LOE ID:	1501
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with municipal beneficial uses, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID 33427
Loveland Reservoir

Region 9

Pollutant:	o-Dichlorobenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33427, o-Dichlorobenzene

Region 9

Loveland Reservoir

LOE ID: 1487

Pollutant: o-Dichlorobenzene
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Loveland Reservoir near the dam site 1.
Temporal Representation: Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.

Environmental Conditions:
QAPP Information: USGS :<http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33427, o-Dichlorobenzene

Region 9

Loveland Reservoir

LOE ID:	1488
Pollutant:	o-Dichlorobenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for o-Dichlorobenzene is 0.6 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	44692	Region 9
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Loveland Reservoir

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44692, o-Xylene
Loveland Reservoir**

Region 9

LOE ID:	1503
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with municipal beneficial uses, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at the Loveland Reservoir near the dam site 1.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 44692, o-Xylene
Loveland Reservoir**

Region 9

LOE ID:	1504
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with municipal beneficial uses, the WQO for Xylenes is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at the Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33482	Region 9
Loveland Reservoir		

Pollutant:	p-Dichlorobenzene (DCB)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33482, p-Dichlorobenzene (DCB)	Region 9
Loveland Reservoir	

LOE ID: 1486

Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. None of the 9 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet site 2.
Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33482, p-Dichlorobenzene (DCB)

Region 9

Loveland Reservoir

LOE ID:	1485
Pollutant:	p-Dichlorobenzene (DCB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. None of the 12 samples were in exceedance. (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for p-Dichlorobenzene is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam, site 1.

Temporal Representation:	Samples were collected 1-2 times per day on one day every other month from 09/1998 to 09/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	33382	Region 9
Loveland Reservoir		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 4 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33382, Manganese	Region 9
Loveland Reservoir	

LOE ID:	1538
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority from 1997 to 2000. Two of the 4 samples were in exceedance. Two years had samples which exceeded 0.05 mg/L more than 10% of the time.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Loveland Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected in 12/1997, 06/1998, 07/1999, and 02/2000. One sample was collected each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33159	Region 9
Loveland Reservoir		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-five of the 72 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33159, Oxygen, Dissolved	Region 9
Loveland Reservoir	

LOE ID:	1470
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS every other month from 09/1998 to 09/1999. For all sampling dates, dissolved oxygen concentration decreased as the depth increased. For all sampling days except 01/07/1999, at least the top 4 meters had DO concentrations that met standards. For samples in 09/1998, standards were not met at depths greater than 4m. For 11/1998, standards were not met in water deeper than 10m. Standards were not met in 01/1999. Standards were met until the water reached 26m deep in 03/1999. In 05/1999, standards were not met in water deeper than 7m. Waters deeper than 5m did not meet standards in 07/1999 sampling. In 09/1999, waters deeper than 8m did not meet standards (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses except MAR, WARM, and COLD , the WQO for Dissolved Oxygen is 7.0 (minimum) mg/L. The annual mean concentration is not to be less than this more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam. Samples were collected at depths of 0.1m to 50m.
Temporal Representation:	Samples were collected on one day, every other month from 09/10/1998 to 09/21/1999.
Environmental Conditions:	
QAPP Information:	USGS: http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33159, Oxygen, Dissolved
Loveland Reservoir**

Region 9

LOE ID:	1471
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	72
Number of Exceedances:	45
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS every other month from 09/1998 to 07/1999. For all sampling days, the DO concentration decreased as the water depth increased. For all sampling days, the dissolved oxygen concentration met standards at more shallow depths, but not in deeper waters. For all days, the top at least 3 meters met standards. Overall, including all depths, 45 of 72 samples were in exceedance (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses except MAR, WARM, and COLD, the WQO for Dissolved Oxygen is 7.0 (minimum) mg/L. The annual mean

concentration is not to be less than this more than 10% of the time.
[Placeholder reference 2006 303\(d\)](#)

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Loveland Reservoir at the east end near the source inlet. Samples were collected at depths of 0.1m to 18.0 m.

Temporal Representation: Samples were collected on one day, every other month from 09/10/1998 to 07/13/1999.

Environmental Conditions:

QAPP Information: USGS: <http://water.usgs.gov/owq/FieldManual/Data> is from USGS Water Quality Monitoring Study.

QAPP Information Reference(s):

DECISION ID	33463	Region 9
Loveland Reservoir		

Pollutant: pH

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Sources: Source Unknown

Expected TMDL Completion Date: 2019

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

However, USEPA has decided to place this water body-pollutant combination on the 303(d) list of Water Quality Limited Segments.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty one of the 194 samples exceeded the Basin Plan criteria, and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. However, USEPA conducted their own assessment and found that there were greater than 10% exceedences of the Basin Plans numeric WQO for pH (35 out of 212) samples.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33463, pH	Region 9
Loveland Reservoir	

LOE ID: 1545

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by Sweetwater Authority from 1997 to 2000. Four of the 8 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir. Exact location was not reported.
Temporal Representation:	Samples were collected from 1997 to 2000. 1-3 samples were collected per year. Samples were collected during the winter and summer months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33463, pH

Region 9

Loveland Reservoir

LOE ID:	1474
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	212
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Available data indicate greater than 10% exceedences of Basin Plan numeric WQO for pH (35 out of 212) samples (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam. Samples were collected at depths of 0.1m to 50m.
Temporal Representation:	Samples were collected on one day, every other month, except for November from 09/10/1998 to 09/21/1999.
Environmental Conditions:	
QAPP Information:	Data record: 1997-2000, USGS and Sweetwater Authority
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33463, pH**Region 9****Loveland Reservoir**

LOE ID:	1472
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	141
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 09/1999. For all sampling days, there was a slight decrease in pH as the water depth increased. Overall, including samples at all recorded depths, 16 of 141 samples were in exceedance of the maximum standard. None of the samples were below the minimum standard (USGS, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir near the dam. Samples were collected at depths of 0.1m to 50m.
Temporal Representation:	Samples were collected on one day, every other month, except for November from 09/10/1998 to 09/21/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33463, pH**Region 9****Loveland Reservoir**

LOE ID:	1473
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	53
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USGS from 09/1998 to 07/1999. For all sampling days, there was a slight decrease in pH as the water depth increased. Overall, including samples at all recorded depths, 15 of 53 samples were in exceedance of the maximum standard. None of the samples were below the minimum standard (USGS, 2002).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loveland Reservoir at the east end near the source inlet. Samples were collected at depths of 0.1m to 18.0m.
Temporal Representation:	Samples were collected on one day every other month, except for November, from 09/1998 to 07/1999.
Environmental Conditions:	
QAPP Information:	USGS : http://water.usgs.gov/owq/FieldManual/Data is from USGS Water Quality Monitoring Study.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Otay Reservoir, Lower](#)
Water Body ID: CAL9103100019991117155943
Water Body Type: Lake & Reservoir

DECISION ID	43242	Region 9
Otay Reservoir, Lower		

Pollutant: Phosphorus
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the 28 samples exceed the Basin Plan water quality objective for total phosphorus as P.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 28 samples exceed the Basin Plan water quality objective for total phosphorus as P and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43242, Phosphorus	Region 9
Otay Reservoir, Lower	

LOE ID: 6171
Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of the 28 samples exceeded the water quality objective. Monitoring data collected by the City of San Diego's Water Quality Monitoring for Drinking Source Water Reservoirs. Sampling period covered January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.025 mg/L for total phosphorus in any standing body of water.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at Otay Reservoir, Lower at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory, Quality Assurance Manual

DECISION ID	32800	Region 9
Otay Reservoir, Lower		

Pollutant:	Color
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. There were 223 out of 423 samples that exceeded the Basin Plan water quality objective for color.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. There were 223 out of 423 samples that exceeded the Basin Plan water quality objective for color and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32800, Color

Region 9

Otay Reservoir, Lower

LOE ID:	1560
Pollutant:	Color
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	423
Number of Exceedances:	223
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Color data was collected at sample site OTA-0 by the City of San Diego Water. Dept. from March 1996 to December 2000. For the MUN beneficial use, there were 223 out of 423 samples in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The WQO for color in inland surface waters with a municipal beneficial use is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the streambed. Depth samples were also collected near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from January 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33178

Region 9

Otay Reservoir, Lower

Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for 1,2-Dibromo-3-chloropropane (DBCP); all 18 samples were 'non-detects'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for 1,2-Dibromo-3-chloropropane (DBCP); all 18 samples were 'non-detects' and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33178, 1,2-Dibromo-3-chloropropane (DBCP)
Otay Reservoir, Lower**

Region 9

LOE ID:	1582
Pollutant:	1,2-Dibromo-3-chloropropane (DBCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. 0 of 18 samples were in exceedance. All 18 samples were non detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all inland surface waters with a municipal beneficial use, the WQO for DBCP is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at samples site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to May 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

DECISION ID	32676	Region 9
Otay Reservoir, Lower		

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the 22 samples exceed the Basin Plan water quality objective for aluminum.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used is of 'unknown' quality which does not satisfy the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 22 samples exceed the Basin Plan water quality objective for aluminum and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32676, Aluminum	Region 9
Otay Reservoir, Lower	

LOE ID: 1553
Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 22
Number of Exceedances: 1
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected by the City of San Diego Water Dept. from January 1996 to February 2000. One of 22 samples was in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: From the Basin Plan: For all inland surface waters the WQO for Aluminum for a BU of MUN

Objective/Criterion Reference:	is 0.2 mg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at a sample site labeled OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected approximately every 3 months from January 1996 to February 2000. Quarterly samples.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43097	Region 9
Otay Reservoir, Lower		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for antimony.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 22 samples exceed the Basin Plan water quality objective for antimony and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43097, Antimony	Region 9
Otay Reservoir, Lower	

LOE ID:	1555
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from January 1996 to June 2001. There were no exceedances out of 22 samples (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Data was collected from January 1996 to June 2001. Samples appear to have been collected on a quarterly basis.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32978	Region 9
Otay Reservoir, Lower		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 22 samples exceed the Basin Plan water quality objective for arsenic and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32978, Arsenic

Region 9

Otay Reservoir, Lower

LOE ID: 1556

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 22
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected by the City of San Diego Water Dept. from January 1996 to September 2000 at sample site OTA-0. None of the 22 samples were in exceedance (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.

Temporal Representation: Samples were collected from January 1996 to September 2000. They appear to be quarterly samples.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

32979

Region 9

Otay Reservoir, Lower

Pollutant: Barium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22 of the samples exceed the Basin Plan water quality objective for barium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 of the samples exceed the Basin Plan water quality objective for barium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32979, Barium
Otay Reservoir, Lower**

Region 9

LOE ID:	1557
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. at sample site OTA-0 from January 1996 to June 2001. None of the 22 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Quarterly samples were collected between January 1996 and June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33228
Otay Reservoir, Lower**

Region 9

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for beryllium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 samples exceed the Basin Plan water quality objective for beryllium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33228, Beryllium
Otay Reservoir, Lower

Region 9

LOE ID: 1576

Pollutant: Beryllium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 22
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Beryllium data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to June 2001. None of the 22 samples were in exceedance (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for beryllium is 0.004 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower.

Temporal Representation: Samples were collected on a quarterly basis from March 1997 to June 2001.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	33030	Region 9
Otay Reservoir, Lower		

Pollutant:	Boron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Basin Plan water quality objective for boron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the Basin Plan water quality objective for boron and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33030, Boron	Region 9
Otay Reservoir, Lower	

LOE ID:	1577
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Boron data was collected at sample site OTA-0 by the City of San Diego Water Dept. on March 8, 2001. One sample was collected, and it was not in exceedance (SWRCB, 2003).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for boron is 0.75 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	One sample was collected on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33125	Region 9
Otay Reservoir, Lower		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 samples exceed the Basin Plan water quality objective for cadmium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33125, Cadmium		Region 9
Otay Reservoir, Lower		

LOE ID:	1578
Pollutant:	Cadmium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Cadmium data was collected at site OTA-0 by the City of San Diego Water Dept. from march 1997 to June 2001. Of 22 samples, none were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33152	Region 9
Otay Reservoir, Lower		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for chlordane; all 16 samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceed the Basin Plan water quality objective for chlordane; all 16 samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33152, Chlordane
Otay Reservoir, Lower**

Region 9

LOE ID:	1590
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All 16 samples were non-detects (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for total chlordane is 0.0001mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected between March 1997 and May 2001. There are 2-4 samples per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 44138
Otay Reservoir, Lower**

Region 9

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 25 samples exceed the Basin Plan water quality objective for chloride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 25 samples exceed the Basin Plan water quality objective for chloride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44138, Chloride
Otay Reservoir, Lower**

Region 9

LOE ID:	1558
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from February 1996 to December 2000 at sample site OTA-0. There were no exceedances out of 25 samples (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The WQO for chloride for inland surface waters is 500 mg/L
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected from February 1996 to December 2000. Samples appear to have been taken quarterly.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 32799
Otay Reservoir, Lower**

Region 9

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 20 samples exceed the Basin Plan water quality objective for chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceed the Basin Plan water quality objective for chromium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32799, Chromium	Region 9
Otay Reservoir, Lower	

LOE ID:	1559
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Chromium data was collected at site OTA-0 by the City of San Diego Water Dept. from January 1996 to June 2000. There were no exceedances out of 20 samples (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The Chromium WQO for inland surface waters with a municipal beneficial use is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in Lower Otay Reservoir near the outlet tower.

Temporal Representation:	Samples were collected from January 1996 to June 2000. Two to 3 samples per year were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32696	Region 9
Otay Reservoir, Lower		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22 samples exceed the Basin Plan water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 samples exceed the Basin Plan water quality objective for copper and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32696, Copper	Region 9
Otay Reservoir, Lower	

LOE ID:	1561
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at sample site OTA-0 by the City of San Diego Water Dept. from January 1996 to June 2001. There were no exceedances out of 22 samples (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The WQO for copper for inland surface waters with a municipal beneficial use is 1.0 mg/L
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected from January 1996 to June 2001. Samples were collected on a quarterly basis.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43559	Region 9
Otay Reservoir, Lower		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for endrin; all samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceed the Basin Plan water quality objective for endrin; all samples were non-detect. And, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43559, Endrin	Region 9
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Otay Reservoir, Lower

LOE ID:	1583
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Endrin samples were collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All samples were non-detect (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a somewhat quarterly basis from March 1997 to May 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	42797	Region 9
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Otay Reservoir, Lower

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for fluoride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for fluoride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 42797, Fluoride
Otay Reservoir, Lower**

Region 9

LOE ID:	1562
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fluoride data was collected by the City of San Diego Water Dept. at sample site OTA-0 from March 1996 to September 2000. There were no exceedances out of 19 samples. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The WQO for Fluoride for inland surface waters with a municipal WQO is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Quarterly samples were collected from March 1996 to September 2000.
Environmental Conditions:	
QAPP Information:	Data used for 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 41520
Otay Reservoir, Lower**

Region 9

Pollutant:	Glyphosate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of 18 samples exceed the Basin Plan water quality objective for glyphosate; all 18 samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of 18 samples exceed the Basin Plan water quality objective for glyphosate; all 18 samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 41520, Glyphosate
Otay Reservoir, Lower**

Region 9

LOE ID:	1592
Pollutant:	Glyphosate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Samples were collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to July 2001. None of 18 samples were in exceedance. All 18 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for glyphosate is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to July 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

DECISION ID	33243	Region 9
Otay Reservoir, Lower		

Pollutant:	Heptachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for heptachlor; all 16 samples were non-detect.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 16 samples exceed the Basin Plan water quality objective for heptachlor; all 16 samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33243, Heptachlor	Region 9
Otay Reservoir, Lower	

LOE ID:	1585
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at sample site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All 16 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for heptachlor is 0.00001mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a somewhat quarterly basis from March 1997 to May 2001. There are 2-4 samples per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33132	Region 9
Otay Reservoir, Lower		

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for heptachlor epoxide; all 16 samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceed the Basin Plan water quality objective for heptachlor epoxide; all 16 samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33132, Heptachlor epoxide	Region 9
Otay Reservoir, Lower	

LOE ID:	1584
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All 16 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for heptachlor epoxide is 0.00001mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a somewhat quarterly basis from March 1997 to May 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33185	Region 9
Otay Reservoir, Lower		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for hexachlorobenzene (HCB); all 16 samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 16 samples exceed the Basin Plan water quality objective for hexachlorobenzene (HCB); all 16 samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33185, Hexachlorobenzene/ HCB
Otay Reservoir, Lower**

Region 9

LOE ID:	1586
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at sample site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All 16 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for hexachlorobenzene is 0.001mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a somewhat quarterly basis from March 1997 to May 2001. There were 2-4 samples per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33186
Otay Reservoir, Lower**

Region 9

Pollutant:	Hexachlorocyclopentadiene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for hexachlorocyclopentadiene; all samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceed the Basin Plan water quality objective for hexachlorocyclopentadiene; all samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 33186, Hexachlorocyclopentadiene
Otay Reservoir, Lower**

Region 9

LOE ID:	1587
Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All 16 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected somewhat quarterly from March 1997 to May 2001. there are 2-4 samples per year.
Environmental Conditions:	

DECISION ID	42756	Region 9
Otay Reservoir, Lower		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan water quality objective for lindane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 8 samples exceed the Basin Plan water quality objective for lindane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42756, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Otay Reservoir, Lower	

LOE ID: 1588

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data was collected at site OTA-0 by the City of San Diego Water Dept. from February 1999

	to May 2001. None of the 8 samples were in exceedance. All 8 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for lindane is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected between February 1999 and May 2001. There were 2-4 samples per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33052	Region 9
Otay Reservoir, Lower		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for mercury.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the Basin Plan water quality objective for mercury and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33052, Mercury	Region 9
Otay Reservoir, Lower	

LOE ID:	1579
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Mercury data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to June 2001. Of 18 samples, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from march 1997 to June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44505	Region 9
Otay Reservoir, Lower		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Methoxychlor Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Basin Plan water quality objective for methoxychlor; all samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 16 samples exceed the Basin Plan water quality objective for methoxychlor; all samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44505, Methoxychlor
Otay Reservoir, Lower**

Region 9

LOE ID:	1589
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All 16 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for methoxychlor is 0.04 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected from March 1997 to May 2001. Two to 4 samples per year were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 32805
Otay Reservoir, Lower**

Region 9

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 20 samples exceed the Basin Plan water quality objective for nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceed the Basin Plan water quality objective for nickel and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32805, Nickel
Otay Reservoir, Lower**

Region 9

LOE ID:	1566
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nickel data was collected at site OTA-0 by the City of San Diego Water Dept. from September 1996 to June 2001. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use the WQO for nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data was collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected from September 1996 to June 2001. There is approximately one sample per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan water quality objective for picloram.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Basin Plan water quality objective for picloram andthis sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32383, Picloram	Region 9
Otay Reservoir, Lower	

LOE ID:	1569
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Picloram data was collected at sire OTA-0 by the City of San Diego Water Dept. from December 1998 to December 1999. None of the 3 samples were in exceedance of the standards. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	One sample each was collected in December 1998, September 1999, and December 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32964	Region 9
Otay Reservoir, Lower		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 21 samples exceed the Basin Plan water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 21 samples exceed the Basin Plan water quality objective for selenium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32964, Selenium	Region 9
Otay Reservoir, Lower	

LOE ID:	1570
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Selenium data was collected at site OTA-0 by the City of San Diego Water Dept. from June 1996 to June 2001. None of the 21 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected between June 1996 and June 2001. Samples were collected on a quarterly basis.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33177	Region 9
Otay Reservoir, Lower		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceeded the Basin Plan criteria. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33177, Silver	Region 9
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Otay Reservoir, Lower

LOE ID:	1580
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Silver data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to June 2001. Of 18 samples, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all inland surface waters with a municipal beneficial use, the WQO for silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 32579

Region 9

Otay Reservoir, Lower

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 24 samples exceed the Basin Plan water quality objective for sulfate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 24 samples exceed the Basin Plan water quality objective for sulfate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32579, Sulfates

Region 9

Otay Reservoir, Lower

LOE ID:	1571
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Sulfate data was collected at site OTA-0 by the City of San Diego Water Dept. from February 1996 to December 2000. None of the 24 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters for all beneficial uses, the WQO for sulfate is 250 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from February 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 42750

Region 9

Otay Reservoir, Lower

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Basin Plan water quality objective for thallium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Basin Plan water quality objective for thallium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 42750, Thallium
Otay Reservoir, Lower**

Region 9

LOE ID:	1581
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Thallium data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to June 2001. Of 18 samples, none were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from March 1997 to June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 32630
Otay Reservoir, Lower**

Region 9

Pollutant: Toluene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan water quality objective for toluene.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 2 samples exceed the Basin Plan water quality objective for toluene and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32630, Toluene
Otay Reservoir, Lower**

Region 9

LOE ID:	1573
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Toluene data was collected at sample site OTA-0 by the City of San Diego Water Dept. in February 1999 and February 2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use the MCL for Toluene is 0.15 mg/L (From Table 3-6 in Basin Plan). A less stringent WQO for Toluene for inland surface waters with a municipal beneficial use is 1.0 mg/L from Table 3-10 of the Basin Plan.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	One sample was collected in February 1999 and one sample was collected in February 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32618	Region 9
Otay Reservoir, Lower		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. None of the 10 samples exceed the Basin Plan water quality objective for total dissolved solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 10 samples exceed the Basin Plan water quality objective for total dissolved solids and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32618, Total Dissolved Solids	Region 9
Otay Reservoir, Lower	

LOE ID:	1572
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	TDS data was collected at site OTA-0 by the City of San Diego Water Dept. from September

Data Reference:	1998 to December 2000. None of the 10 samples were in exceedance. (SWRCB, 2003). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for total dissolved solids is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected from September 1998 to December 2000 for what appears to be quarterly sampling.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33153	Region 9
Otay Reservoir, Lower		

Pollutant:	Toxaphene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceeded the Basin Plan water quality objective for toxaphene; all samples were non-detect.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceeded the Basin Plan water quality objective for toxaphene; all samples were non-detect and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33153, Toxaphene	Region 9
Otay Reservoir, Lower	

LOE ID:	1591
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Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1997 to May 2001. None of the 16 samples were in exceedance. All 16 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for toxaphene is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected from March 1997 to May 2001. There are 2-4 samples per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33053	Region 9
Otay Reservoir, Lower		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Ninety-three of the 979 samples exceed the Basin Plan water quality objective for turbidity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ninety-three of the 979 samples exceed the Basin Plan water quality objective for turbidity and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33053, Turbidity
Otay Reservoir, Lower**

Region 9

LOE ID: 1574

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 979
Number of Exceedances: 93

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Turbidity data was collected at site OTA-0 by the City of San Diego Water Dept. from January 1996 to December 2000. Ninety-three of 979 samples was in exceedance of the municipal beneficial use WQO of 5 units. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters with all other beneficial uses, the WQO for turbidity is 20 ntu.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data was collected at site OTA-0 in the Lower Ota y Reservoir near the outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the stream bed. Depth samples were also collected near the outlet tower.

Temporal Representation: Samples were collected on a quarterly basis between January 1996 and December 2000. Samples at some depths were collected multiple times each month.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

**DECISION ID 33054
Otay Reservoir, Lower**

Region 9

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for zinc and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33054, Zinc
Otay Reservoir, Lower**

Region 9

LOE ID:	1575
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zinc data was collected at OTA-0 by the City of San Diego Water Dept. from January 1996 to June 2001. None of the 19 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 at the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from march 1997 to June 2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 42751
Otay Reservoir, Lower**

Region 9

Pollutant:	meta-para xylenes
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the two samples exceed the Basin Plan water quality objective for xylenes.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the two samples exceed the Basin Plan water quality objective for xylenes and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 42751, meta-para xylenes
Otay Reservoir, Lower**

Region 9

LOE ID:	1565
Pollutant:	meta-para xylenes
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	M-p xylene data was collected at site OTA-0 by the City of San Diego Water Dept. in February 1999 and February 2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The MCL for Xylenes for all inland surface waters with a municipal beneficial use is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)

Spatial Representation:	Samples were collected at site OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected in February 1999 and February 2000. One sample was collected each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43145	Region 9
Otay Reservoir, Lower		

Pollutant:	o-Xylene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the two samples exceed the Basin Plan water quality objective for xylenes.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the two samples exceed the Basin Plan water quality objective for xylenes and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43145, o-Xylene	Region 9
Otay Reservoir, Lower	

LOE ID:	1567
Pollutant:	o-Xylene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Xylene data was collected at site OTA-0 by the City of San Diego Water Dept. in February 1999 and February 2000. There were no exceedances out of 2 samples. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all inland surface waters with a municipal beneficial use, the WQO is 1.750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	MCL is for either a single isomer or the sum of the isomers. Incorporations by reference are prospective including future changes to the incorporated provisions as the changes take effect.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower.
Temporal Representation:	One sample was collected in February 1999 and one sample was collected in February 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32559	Region 9
Otay Reservoir, Lower		

Pollutant:	Ammonia
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Fifty-six of 104 samples exceed the Basin Plan water quality objective for ammonia.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-six of 104 samples exceed the Basin Plan water quality objective for ammonia and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Otay Reservoir, Lower

LOE ID:	1554
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	104
Number of Exceedances:	56
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego Water Dept. from December 1996 to July 2001. Fifty-six of 104 samples are in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: 0.025 mg/L
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from one location in the reservoir labeled OTA-0 in Lower Otay Reservoir near the outlet tower.
Temporal Representation:	Samples were collected from December 1996 to July 2001. Samples were collected monthly.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

32878

Region 9

Otay Reservoir, Lower

Pollutant:	Iron
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Natural Sources Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess pollutant. Forty-four of 103 samples exceed the Basin Plan water quality objective for iron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination to the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-four of 103 samples exceed the Basin Plan water quality objective for iron and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32878, Iron
Otay Reservoir, Lower**

Region 9

LOE ID:	1563
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	103
Number of Exceedances:	44
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Iron data was collected by the City of San Diego Water Department at site OTA-0 from January 1996 to July 2001. Of 103 samples, 44 were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The WQO for iron for inland surface waters with a municipal beneficial use is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay reservoir near the outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the streambed. Depth samples were also collected near the outlet tower.
Temporal Representation:	Samples were collected from January 1996 to July 2001. Samples were collected monthly.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 32804
Otay Reservoir, Lower**

Region 9

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Nine of 26 samples exceed the Basin Plan water quality objective for manganese.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination to the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 26 samples exceed the Basin Plan water quality objective for manganese and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 32804, Manganese
Otay Reservoir, Lower**

Region 9

LOE ID:	1564
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Manganese data was collected at site OTA-0 by the City of San Diego Water Dept. from January 1996 to June 2001. Nine of 26 samples were in exceedance and the criteria was exceeded more than 10% of the time on 4 of the years.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Lower Otay Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at sample site OTA-0 in the Lower Otay Reservoir near the outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the streambed. Depth samples were also collected near the outlet tower. Samples were collected on a quarterly basis from January 1996 to June 2001.

Temporal Representation:

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	43345	Region 9
Otay Reservoir, Lower		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Twenty seven of the 27 samples exceed the Basin Plan water quality objective for total nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Twenty seven of the 27 samples exceed the Basin Plan water quality objective for total nitrogen as N and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43345, Nitrogen	Region 9
Otay Reservoir, Lower	

LOE ID:	6170
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	27
Number of Exceedances:	27
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All 27 samples exceeded the water quality objective. Water quality data collected by the City of San Diego's for their Water Quality Monitoring for Drinking Source Water Reservoirs. Samples were collected from January 2005 to December 2006.
Data Reference:	Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Otay Reservoir, Lower at a standard location designated "Station A".
Temporal Representation:	Samples were collected once or twice a month from January 2005 to December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

DECISION ID	32382	Region 9
Otay Reservoir, Lower		

Pollutant:	pH
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Ten of 24 samples exceeded 8.5 pH units. None of 24 samples were below 6.5 pH units.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 24 samples exceeded 8.5 pH units. None of 24 samples were below 6.5 pH units and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**Regional Board Decision
Recommendation:**

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.

**Line of Evidence (LOE) for Decision ID 32382, pH
Otay Reservoir, Lower**

Region 9

LOE ID:	1568
Pollutant:	pH (high)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	pH data was collected at site OTA-0 by the City of San Diego Water Dept. from March 1996 to December 2000. Ten of 24 samples exceeded 8.5 pH units. None of 24 samples were below 6.5 pH units.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site OTA-0 in the Lower Otay Reservoir near the outlet tower. Samples were collected at the water's surface and at depths of 106 ft., 117ft., 84ft., and 95ft. above the streambed. Depth samples were also collected near the outlet tower.
Temporal Representation:	Samples were collected on a quarterly basis from March 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Barrett Lake](#)
Water Body ID: CAL9113000019980803101540
Water Body Type: Lake & Reservoir

DECISION ID	42328	Region 9
Barrett Lake		

Pollutant: Phosphorus
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Four of the 9 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 9 samples exceeded the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 42328, Phosphorus	Region 9
Barrett Lake	

LOE ID: 6154
Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of the nine samples collected exceeded water quality standards. Samples were collected by the City of San Diego's Water Department. Samples were collected from January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.025 mg/L for total phosphorus in any standing body of water. (RWQCB, 2007)
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at Barrett Lake at a standard location designated "Station AA".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however some months were not sampled.
Environmental Conditions:	The Horse Fire burned north of Barrett Lake in the Cleveland National Forest from July 23 - 31, 2006. Both exceedances occurred before the onset of the fire.
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	

DECISION ID	33636	Region 9
Barrett Lake		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>One line of evidence is available in the administrative record to assess this pollutant. One of the 14 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33636, Aluminum	Region 9
Barrett Lake	

LOE ID: 1593

Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. One of 14 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir at station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1996 to 12/1998 and once each in 06/1999 and 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33868	Region 9
Barrett Lake		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33868, Antimony	Region 9
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Barrett Lake

LOE ID:	1594
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept in 1996 and 1997. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir at station BAA-0.
Temporal Representation:	One sample each was collected in 01/1996, 06/1996, and 03/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33869	Region 9
Barrett Lake		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 19 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33869, Arsenic

Region 9

Barrett Lake

LOE ID: 1595

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 19 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation: Samples were collected on a quarterly basis from 01/1996 to 09/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

45728

Region 9

Barrett Lake

Pollutant: Barium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 19 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 45728, Barium

Region 9

Barrett Lake

LOE ID:	1596
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 19 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33870

Region 9

Barrett Lake

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. A single sample

was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33870, Cadmium

Region 9

Barrett Lake

LOE ID:	1597
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected in 1996 by the City of San Diego Water Dept. The single collected sample was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	One sample was collected on 06/05/1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33303

Region 9

Barrett Lake

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence are available in the administrative record to assess this pollutant. None of 20 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceeded the Basin Plan criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33303, Chloride

Region 9

Barrett Lake

LOE ID:	1598
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1996 to 2000. None of the 20 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	



DECISION ID	33304	Region 9
Barrett Lake		

Pollutant:	Chromium (total)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33304, Chromium (total)	Region 9
Barrett Lake	

LOE ID:	1599
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected 1-3 times per year from 01/1996 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33916	Region 9
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Barrett Lake

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33916, Copper

Region 9

Barrett Lake

LOE ID:	1601
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 6 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected 1-2 times per year from 01/1996 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Pollutant:	Ethylbenzene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33951, Ethylbenzene	Region 9
Barrett Lake	

LOE ID:	1602
Pollutant:	Ethylbenzene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996. One sample was collected. It was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for ethylbenzene is 0.7 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	One sample was collected on 09/09/1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33670	Region 9
Barrett Lake		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 19 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33670, Fluoride	Region 9
Barrett Lake	

LOE ID:	1603
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 19 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation: Samples were collected on a quarterly basis from 03/1996 to 09/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment. QA=?
QAPP Information Reference(s):

DECISION ID	43068	Region 9
Barrett Lake		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43068, Iron	Region 9
Barrett Lake	

LOE ID:	1604
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997-2000. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation: Samples were collected once each in 12/1997, 03/1998, and 12/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment. QA=?
QAPP Information Reference(s):

DECISION ID	33897	Region 9
Barrett Lake		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33897, Mercury	Region 9
Barrett Lake	

LOE ID:	1606
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/1999. One sample was collected. It was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is

Objective/Criterion Reference: 0.002 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at Barrett Reservoir station BAA-0.
 Temporal Representation: One sample was collected on 03/04/1999.
 Environmental Conditions:
 QAPP Information: Data used in 2002 assessment.
 QAPP Information Reference(s):

DECISION ID	33847	Region 9
Barrett Lake		

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33847, Nickel	Region 9
Barrett Lake	

LOE ID: 1607

Pollutant: Nickel
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 1996 and 1999. None of the 2 samples were in exceedance.
 Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected once each in 06/1996 and 06/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33963	Region 9
Barrett Lake		

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33963, Picloram	Region 9
Barrett Lake	

LOE ID:	1609
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 2000. None of 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected once each in 12/1998, 09/1999, 12/1999, and 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33964	Region 9
Barrett Lake		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33964, Selenium	Region 9
Barrett Lake	

LOE ID:	1610
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 1997. None of 4

Data Reference:	samples were in exceedance. Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected once each in 09/1996, 03/1997, 09/1997, and 12/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43247	Region 9
Barrett Lake		

Pollutant:	Sodium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Five of the samples exceed the water quality objective. The exceedances may have been the result of the 2006 Horse Fire and further data should verify this.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 8 samples exceeded the AGR standard, however this may have been the result of 2006 Horse Fire. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43247, Sodium	Region 9
Barrett Lake	

LOE ID: 6151

Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of the eight samples collected exceeded water quality standards. Samples were collected by the City of San Diego's Water Department. Samples were collected from January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the percent sodium objective was developed for the protection of agricultural uses from the potential hazard due to sodium in irrigation waters. The value of 60 percent sodium is based upon Water Quality Criteria, by McKee and Wolf, 1963 (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Barrett Lake at "Station A".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however some months were not sampled.
Environmental Conditions:	The Horse Fire burned north of Barrett Lake in the Cleveland National Forest from July 23 - 31, 2006.
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	

DECISION ID	34022	Region 9
Barrett Lake		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceeded the Basin Plan criteria, and this sample size is insufficient to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34022, Sulfates

Region 9

Barrett Lake

LOE ID:	1611
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. None of the 20 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33961

Region 9

Barrett Lake

Pollutant:	Toluene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33961, Toluene

Region 9

Barrett Lake

LOE ID:	1613
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For Inland surface waters with a municipal beneficial use, the WQO for Toluene is 0.15 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected once each in 03/1996 and 09/1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

34037

Region 9

Barrett Lake

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 10 samples exceed the Basin Plan criteria and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34037, Total Dissolved Solids

Region 9

Barrett Lake

LOE ID:	1612
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1998 to 2000. None of the 10 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 09/1998 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

43001

Region 9

Barrett Lake

Pollutant:	Total Trihalomethane (TTHM)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 8 samples exceeded the drinking water MCL standard and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43001, Total Trihalomethane (TTHM)

Region 9

Barrett Lake

LOE ID:	6155
Pollutant:	Total Trihalomethane (TTHM)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All eight samples collected exceeded water quality standards. Samples were collected by the City of San Diego's Water Department. Samples were collected from January 2005 to December 2006.
Data Reference:	Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The US EPA has established a maximum contaminant level for trihalomethanes of an average annual concentration of 0.08 mg/L (U.S. EPA, 2008).
Objective/Criterion Reference:	Information Collection Rule. Trihalomethans (THM)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One surface water sample was collected per sampling event at Barrett Lake at a standard

location designated "Station AA".

Temporal Representation: Samples were collected approximately once a month from January 2005 to December 2006; however some months were not sampled.

Environmental Conditions: The Horse Fire burned north of Barrett Lake in the Cleveland National Forest from July 23 - 31, 2006. Both exceedances occurred before the onset of the fire.

QAPP Information: Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.

QAPP Information Reference(s):

DECISION ID	33962	Region 9
Barrett Lake		

Pollutant: Turbidity

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status: Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. One of the 20 samples exceed the Basin Plan criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33962, Turbidity	Region 9
Barrett Lake	

LOE ID: 1614

Pollutant: Turbidity

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 20

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept from 1996 to 2000. One of 20 samples were in exceedance.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	45726	Region 9
Barrett Lake		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the 2010 listing cycle. No new data were assessed for the 2014 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 45726, Zinc	Region 9
Barrett Lake	

LOE ID:	1615
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1996 and 1997. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected once each on 06/05/1996 and 03/03/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33584	Region 9
Barrett Lake		

Pollutant:	Color
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 20 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33584, Color	Region 9
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Barrett Lake

LOE ID:	1600
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept from 1996 to 2000. Nine of the 20 samples were in exceedance and 4 of 20 samples measured color levels at 15 color units.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33542	Region 9
Barrett Lake		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of the nineteen samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. Seven of nineteen samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33542, Manganese

Region 9

Barrett Lake

LOE ID:	1605
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Seven of 19 samples exceeded 0.05 mg/L. This concentration was exceeded more than 10% of the time during the years 1996, 1997, 1998 and 1999.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Barrett Lake is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir site BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 01/1996 to 09/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42336

Region 9

Barrett Lake

Pollutant:	Perchlorate
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the 17 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 17 samples exceed the Secondary MCL drinking water standard for perchlorate and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 42336, Perchlorate

Region 9

Barrett Lake

LOE ID:	6152
Pollutant:	Perchlorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the 17 samples collected exceeded water quality standards. Samples were collected by the City of San Diego's Water Department. Samples were collected from January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters designated for use as domestic or municipal supply shall not contain concentrations of inorganic chemicals in excess of the maximum contaminant levels (MCL) (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The primary MCL for perchlorate is 6 ug/L (CDHP, 2007).
Guideline Reference:	Perchlorate in California Drinking Water: Update and Overview
Spatial Representation:	One surface water sample was collected per sampling event at Barrett Lake at station designated "Station AA".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006;

Environmental Conditions: however some months were not sampled.
 The Horse Fire burned north of Barrett Lake in the Cleveland National Forest from July 23 - 31, 2006. Both exceedances occurred before the onset of the fire.

QAPP Information: Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.

QAPP Information Reference(s):

DECISION ID	45902	Region 9
Barrett Lake		

Pollutant: **Total Nitrogen as N**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows (with update to table 3.1):

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Eight of the 9 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 9 samples exceed the Basin Plan objective for total nitrogen as N and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 45902, Total Nitrogen as N	Region 9
Barrett Lake	

LOE ID: 6153

Pollutant: Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	8
Data and Information Type:	Non-fixed-station monitoring (conventional during key seasons and flows)
Data Used to Assess Water Quality:	Eight of the nine samples collected exceeded water quality standards. Samples were collected by the City of San Diego's Water Department. Samples were collected from January 2005 to December 2006.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at Barrett Lake at a standard location designated "Station AA".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however some months were not sampled.
Environmental Conditions:	The Horse Fire burned north of Barrett Lake in the Cleveland National Forest from July 23 - 31, 2006. Both exceedances occurred before the onset of the fire.
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	

DECISION ID	33940	Region 9
Barrett Lake		

Pollutant:	pH
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 20 samples exceeded the Basin Plan objective, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33940, pH

Region 9

Barrett Lake

LOE ID:	1608
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1996 to 2000. Ten of 20 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Barrett Reservoir station BAA-0.
Temporal Representation:	Samples were collected on a quarterly basis from 03/1996 to 12/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Morena Reservoir](#)
Water Body ID: CAL9115000020011025092811
Water Body Type: Lake & Reservoir

DECISION ID	44184	Region 9
Morena Reservoir		

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Seven of the seven samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of seven samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44184, Nitrogen	Region 9
Morena Reservoir	

LOE ID: 6165
Pollutant: Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Water samples were collected by the City of San Diego for their Water Quality Monitoring Data for Drinking Source Water Reservoirs. Sampling period was January 2005 to December 2006. All seven samples exceeded the water quality objective.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in any standing body of water is 0.025 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at Morena Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however, some months were not sampled.
Environmental Conditions:	The Horse Fire burned west of Morena Reservoir in the Cleveland National Forest from July 23 - 31, 2006.
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory, Quality Assurance Manual

DECISION ID	33815	Region 9
Morena Reservoir		
Pollutant:	Aluminum	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceeded the sediment guideline, and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The benthic community in this water body is not 	

impacted.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33815, Aluminum

Region 9

Morena Reservoir

LOE ID: 1616

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 16
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at site MOA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. None of the 16 samples were in exceedance.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for aluminum is 0.2 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site MOA-0.
Temporal Representation: Samples were collected on a quarterly basis from January 1996 to September 2000.
Environmental Conditions:
QAPP Information: Data used in 2002. assessment.
QAPP Information Reference(s):

DECISION ID 33540

Region 9

Morena Reservoir

Pollutant: Antimony
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the Basin Plan water quality objective for antimony.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six samples exceed the Basin Plan water quality objective for antimony and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33540, Antimony
Morena Reservoir**

Region 9

LOE ID:	1617
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between January 1996 and September 1997. None of the 6 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected between January 1996 and September 1997. Three samples per year were collected.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33541
Morena Reservoir**

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for Arsenic and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33541, Arsenic Morena Reservoir

Region 9

LOE ID:	1618
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. None of the 19 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at site MOA-0.
Temporal Representation: Samples were collected on a quarterly basis from January 1996 to September 2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 33233 **Region 9**

Morena Reservoir

Pollutant: Barium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for Barium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for Barium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33233, Barium **Region 9**

Morena Reservoir

LOE ID: 1619

Pollutant: Barium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. None of 19 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis between January 1996 and September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33172	Region 9
Morena Reservoir		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Basin Plan water quality objective for Cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the Basin Plan water quality objective for Cadmium and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33172, Cadmium	Region 9
Morena Reservoir	

LOE ID:	1620
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. on June 5, 1996. One sample was collected. It was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at site MOA-0.
Temporal Representation:	One sample was collected on 1 day, June 5, 1996.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33212	Region 9
Morena Reservoir		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Chloride Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 20 samples exceed the Basin Plan water quality objective for chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceed the Basin Plan water quality objective for chloride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33212, Chloride

Region 9

Morena Reservoir

LOE ID:	1621
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. None of the 20 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis from March 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33681

Region 9

Morena Reservoir

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the eight samples exceed the Basin Plan water quality objective for chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the eight samples exceed the Basin Plan water quality objective for chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33681, Chromium

Region 9

Morena Reservoir

LOE ID:	1622
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between January 1996 and June 2000. None of the 8 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected between January 1996 and June 2000. One to two samples were collected per year.
Environmental Conditions:	
QAPP Information:	Data used for 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33190

Region 9

Morena Reservoir

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the seven samples exceed the Basin Plan water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the seven samples exceed the Basin Plan water quality objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33190, Copper

Region 9

Morena Reservoir

LOE ID: 1624

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at site MOA-0 by the City of San Diego Water Dept. from January 1996 to September 2000. None of the 7 samples were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Data was collected from January 1996 to September 2000. Four samples were collected in 1996, 1 in 1997, and 2 in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32404	Region 9
Morena Reservoir		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the Basin Plan water quality objective for flouride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 19 samples exceed the Basin Plan water quality objective for flouride and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32404, Fluoride	Region 9
Morena Reservoir	

LOE ID:	1625
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between march 1996 and September 2000. None of 19 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Fluoride is 2.4 mg/L when Annual Average of Maximum Daily Air Temperature is <53.8F, 2.2 mg/L when Annual Average of Maximum Daily Air Temperature is 53.8F-58.3F, 2.0 mg/L when Annual Average of Maximum Daily Air Temperature is 58.4F-63.8F, 1.8 mg/L when Annual Average of Maximum Daily Air Temperature is 63.9F-70.6F, 1.6 mg/L when Annual Average of Maximum Daily Air Temperature is 70.7F-79.2F, and 1.4 mg/L when Annual Average of Maximum Daily Air Temperature is 79.3F-90.5F. For inland surface water with all other beneficial uses the WQO for fluoride is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data was collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32405	Region 9
Morena Reservoir		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the five samples exceed the Basin Plan water quality objective for iron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the five samples exceed the Basin Plan water quality objective for iron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision

Recommendation:**Line of Evidence (LOE) for Decision ID 32405, Iron****Region 9****Morena Reservoir**

LOE ID:	1626
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between December 1998 and September 2000. None of the 5 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected between December 1998 and September 2000. Two samples were collected in 1998 and 3 were collected in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**43032****Region 9****Morena Reservoir**

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the four samples exceed the Basin Plan water quality objective for nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the four samples exceed the Basin Plan water quality objective for nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43032, Nickel

Region 9

Morena Reservoir

LOE ID:	1628
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. from June 1996 to March 1999. None of 4 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use the WQO for nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected from June 1996 to March 1999. 3 samples were collected in 1996, and 1 in 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42301

Region 9

Morena Reservoir

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the 17 samples exceed the Basin Plan water quality objective for dissolved oxygen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 17 samples exceeded the Basin Plan water quality objective for dissolved oxygen and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

**Line of Evidence (LOE) for Decision ID 42301, Oxygen, Dissolved
Morena Reservoir**

Region 9

LOE ID: 6164

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 17
Number of Exceedances: 4

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Samples were collected by the City of San Diego for their Water Quality Monitoring Data for Drinking Source Water Reservoirs. Sampling period was from January 2005 to December 2006. Four of the 17 samples were below 5.0 mg/l objective. The mean of the 17 samples was 7.9 mg/l.

Data Reference: [Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Dissolved oxygen levels shall not be less than 5.0 mg/L in waters with designated WARM beneficial uses. The annual mean shall not be less than 7 mg/L more than 10 percent of the time.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	One surface water sample was collected per sampling event at Morena Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however, some months were not sampled.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory Quality Assurance Manual

DECISION ID	32655	Region 9
Morena Reservoir		

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the three samples exceed the Basin Plan water quality objective for picloram.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the three samples exceed the Basin Plan water quality objective for picloram and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32655, Picloram	Region 9
Morena Reservoir	

LOE ID:	1630
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. on December 3, 1998, September 15, 1999 and December 8, 1999. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	One sample was collected per day on December 3, 1998, September 15, 1999, and December 8, 1999.
Environmental Conditions:	
QAPP Information:	Data used for 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33122	Region 9
Morena Reservoir		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the three samples exceed the Basin Plan water quality objective for Selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the three samples exceed the Basin Plan water quality objective for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33122, Selenium
Morena Reservoir**

Region 9

LOE ID: 1631

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at site MOA-0 by the City of San Diego Water Dept. from September 1996 to December 1997. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for selenium is 0.05 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site MOA-0.
Temporal Representation: One sample was collected each day on September 10, 1996, December 3, 1996, and December 3, 1997.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

**DECISION ID 33170
Morena Reservoir**

Region 9

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 20 samples exceed the Basin Plan water quality objective sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceed the Basin Plan water quality objective sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33170, Sulfates

Region 9

Morena Reservoir

LOE ID:	1632
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. None of the 20 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters for all beneficial uses, the WQO for sulfate is 250 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33498

Region 9

Morena Reservoir

Pollutant:	Toluene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Basin Plan water quality objective for toluene.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the Basin Plan water quality objective for toluene and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33498, Toluene
Morena Reservoir**

Region 9

LOE ID:	1634
Pollutant:	Toluene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. on August 4, 1999. One sample was collected. It was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use the MCL for Toluene is 0.15 mg/L (From Table 3-6 in Basin Plan). A less stringent WQO for Toluene for inland surface waters with a municipal beneficial use is 1.0 mg/L from Table 3-10 of the Basin Plan.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at site MOA-0.
Temporal Representation: One sample was collected on August 4, 1999.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	32658	Region 9
Morena Reservoir		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the ten samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the ten samples exceed the Basin Plan water quality objective for total dissolved solids and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32658, Total Dissolved Solids	Region 9
Morena Reservoir	

LOE ID:	1633
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between September 1998 and December 2000. None of the 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for total dissolved solids is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis from September 1998 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	42687	Region 9
Morena Reservoir		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the 20 samples exceed the Basin Plan water quality objective for turbidity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 20 samples exceed the Basin Plan water quality objective for turbidity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Morena Reservoir

LOE ID:	1635
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Three of the 20 samples were in exceedance of the WQO for municipal waters. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters with all other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data was collected at site MOA-0.
Temporal Representation:	Data was collected on a quarterly basis from March 1996 to December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42718

Region 9

Morena Reservoir

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the Basin Plan objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list</p>

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42718, Zinc

Region 9

Morena Reservoir

LOE ID: 1636

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at site MOA-0 by the City of San Diego Water Dept. on June 5 1996 and December 3, 1996. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data was collected at site MOA-0.
Temporal Representation: One sample was collected each day on June 5, 1996 and December 3, 1996.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 44098

Region 9

Morena Reservoir

Pollutant: Ammonia
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status
Sources: Original
Source Unknown

Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Six of the six samples exceed the Basin Plan water quality objective for un-ionized ammonia (NH₃).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the six samples exceed the Basin Plan water quality objective for un-ionized ammonia (NH₃) and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 44098, Ammonia
Morena Reservoir**

Region 9

LOE ID: 6163

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
Number of Exceedances: 6

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Data was collected by the City of San Diego Water Quality Monitoring Data for their Drinking Source Water Reservoirs report. Six samples were collected between January 2005 to December 2006. All six samples exceeded the water quality objective.

Data Reference: [Water Department. Water Quality Monitoring Data for Drinking Source Water Reservoirs. January 2005 to December 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan the WQO for un-ionized ammonia (NH₃) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: One surface water sample was collected per sampling event at Morena Reservoir at a standard location designated "Station AA".

Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however, some months were not sampled.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were also provided by the San Diego Water Department.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

DECISION ID	33682	Region 9
Morena Reservoir		

Pollutant:	Color
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Eleven of 20 samples exceed the Basin Plan water quality objective for color.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of 20 samples exceed the Basin Plan water quality objective for color and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33682, Color	Region 9
Morena Reservoir	

LOE ID:	1623
Pollutant:	Color
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	20
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between March 19996 and December 2000. Eleven of 20 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for color is 15 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33445	Region 9
Morena Reservoir		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess pollutant. Five of 19 samples exceed the Basin Plan water quality objective for Manganese and all five years had exceedances of 0.05 mg/L more than 10% of the time.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 19 samples exceed the Basin Plan water quality objective for Manganese and all five years had exceedances of 0.05 mg/L more than 10% of the time and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Morena Reservoir

LOE ID:	1627
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at site MOA-0 by the City of San Diego Water Dept. between January 1996 and September 2000. Five of 19 samples were in exceedance and all five years had exceedances of 0.05 mg/L more than 10% of the time.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Morena Reservoir is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis between January 1996 and September 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42720

Region 9

Morena Reservoir

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Five of the five samples exceed the Basin Plan water quality objective for phosphorus as P.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the five samples exceed the Basin Plan water quality objective for phosphorus as P and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 42720, Phosphorus
Morena Reservoir**

Region 9

LOE ID:	6166
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Samples were collected by the City of San Diego for their Water Quality Monitoring Data for Drinking Source Water Reservoirs report. Sampling period was January 2005 to December 2006. All five samples exceeded the water quality objective. Two samples were recorded as non detects but not used in the assessment because the detection limits were not low enough.
Data Reference:	Water Department, Water Quality Monitoring Data for Drinking Source Water Reservoirs, January 2005 to December 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.025 mg/L for total phosphorus in any standing body of water. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One surface water sample was collected per sampling event at Morena Reservoir at a standard location designated "Station A".
Temporal Representation:	Samples were collected approximately once a month from January 2005 to December 2006; however, some months were not sampled.
Environmental Conditions:	The Horse Fire burned west of Morena Reservoir in the Cleveland National Forest from July 23 - 31, 2006.
QAPP Information:	Samples were collected and analyzed according to the Water Quality Laboratory's Quality Assurance Manual. Applicable field and laboratory Standard Operating Procedures were

DECISION ID	33491	Region 9
Morena Reservoir		

Pollutant: pH
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown | Unknown Nonpoint Source
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for addition to the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Ten of 19 samples exceed the Basin Plan water quality objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 19 samples exceed the Basin Plan water quality objective for pH and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33491, pH	Region 9
Morena Reservoir	

LOE ID: 1629

Pollutant: pH (high)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 19
Number of Exceedances: 10

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at site MOA-0 by the City of San Diego Water Dept. between March 1996 and December 2000. Ten of 19 samples were in exceedance.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site MOA-0.
Temporal Representation:	Samples were collected on a quarterly basis between March 1996 and December 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Laguna Canyon Channel](#)
Water Body ID: CAR9011200020011025105029
Water Body Type: River & Stream

DECISION ID	43324	Region 9
Laguna Canyon Channel		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 24 samples exceed the exhibited water toxicity and Two of Six samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is Sufficient justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 24 samples exhibited water toxicity and Two of Six samples exhibited sediment toxicity and this sample size is sufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43324, Toxicity	Region 9
Laguna Canyon Channel	

LOE ID:	7736
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum Algae Growth- None of the five samples exhibited NOEC's less than 100%. Ceriodaphnia dubia -Survival- None of the five samples exhibited NOEC's less than 100%. Ceriodaphnia dubia -Reproduction- None of the five samples collected exhibited NOEC's less than 100%. Hyalella azteca survival- None of the five samples exhibited NOEC's less than 100% according to results in the Orange County Storm Water Annual Progress Reports from 2002 through 2006. Samples were collected from February 2003 through March 2005.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be sustain free from toxic substances in concentrations that are toxic to, or that produce harmful physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station in Laguna Canyon Wash along Highway 133.
Temporal Representation:	Samples were collected from February 2003 through March 2005.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to the County of Orange's quality control plan.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

**Line of Evidence (LOE) for Decision ID 43324, Toxicity
Laguna Canyon Channel**

Region 9

LOE ID:	74126
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is

	defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S00531.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43324, Toxicity
Laguna Canyon Channel

Region 9

LOE ID:	74125
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to test for toxicity. Four of the six samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Purple Urchin development and fertilization and Mysid Biomass and survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station LCWI02 Laguna Canyon Channel.
Temporal Representation:	The sample was collected from November 2006 to February 2009.
Environmental Conditions:	

QAPP Information: The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 43324, Toxicity
Laguna Canyon Channel**

Region 9

LOE ID: 74124

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 3

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Either samples were collected to evaluate water toxicity. Three of the nine samples exhibited statistical and biological significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival, Hyallela survival and Selenastrum.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining if the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation: The samples were collected at stations LC-133 Laguna Canyon Channel.
Temporal Representation: The samples were collected approximately quarterly from June 2006 to November 2009.
Environmental Conditions:

QAPP Information: The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 43324, Toxicity
Laguna Canyon Channel**

Region 9

LOE ID: 2994

Pollutant: Sediment Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. All data points had no associated QA qualifiers (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All samples were collected from one station, Laguna Canyon Creek 2.
Temporal Representation:	Samples were collected from October 2002 through May 2003. Toxicity in the survival endpoint was detected in samples collected on October 29, 2002 and January 14, 2003.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43324, Toxicity Laguna Canyon Channel

Region 9

LOE ID:	21399
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Laguna Canyon Creek station 901SJLAG2 from October 2002 to May 2003. The samples showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - four out of four samples were toxic. Ceriodaphnia dubia survival/reproductive test - Three of the four samples were toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control

Guideline Reference:	values less than the evaluation threshold (EPA, 2002). Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2station 901SJLAG2. (Latitude 33.5726, Longitude -117.7629).
Temporal Representation:	Water samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

**Line of Evidence (LOE) for Decision ID 43324, Toxicity
Laguna Canyon Channel**

Region 9

LOE ID:	26542
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Laguna Canyon Creek station 901SJLAG2 from October 2002 to May 2003. Two of the four samples had quality assurance issues and not used for this line of evidence.
	Neither of the two samples showed significant toxicity levels in the sediment tests with <i>Hyalella azteca</i> according to results in the Surface Water Ambient Monitoring program report.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2station 901SJLAG2. (Latitude 33.5726, Longitude -117.7629).
Temporal Representation:	Water samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 48176
Laguna Canyon Channel

Region 9

Pollutant:	Alkalinity as CaCO₃
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Alkalinity, Carbonate as CaCO₃.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Alkalinity, Carbonate as CaCO₃ and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48176, Alkalinity as CaCO₃ Laguna Canyon Channel

Region 9

LOE ID:	74130
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48177	Region 9
Laguna Canyon Channel		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Aluminum.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Aluminum and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48177, Aluminum	Region 9
Laguna Canyon Channel	

LOE ID:	74080
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48179	Region 9
Laguna Canyon Channel		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirteen samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the thirteen samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48179, Arsenic
Laguna Canyon Channel**

Region 9

LOE ID:	74084
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 12 samples exceeded the water quality objective. Most samples were taken over the duration of storm events with individuals within a composite analyzed.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue and site LC-133 at Laguna Canyon Road.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	Approximately 78 percent of the samples are representative of wet weather conditions.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48179, Arsenic
Laguna Canyon Channel**

Region 9

LOE ID:	74082
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48182	Region 9
Laguna Canyon Channel		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Bifenthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Bifenthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48182, Bifenthrin	Region 9
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Laguna Canyon Channel

LOE ID:	74086
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48185	Region 9
Laguna Canyon Channel		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. One of the 34 samples exceed the California Toxics Rule Objective for Cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
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2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 34 samples exceeded the California Toxics Rule Objective for Cadmium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48185, Cadmium
Laguna Canyon Channel**

Region 9

LOE ID:	74087
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48185, Cadmium
Laguna Canyon Channel**

Region 9

LOE ID:	74089
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the 33 samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue, site SMC00531 at Laguna Canyon Channel, and site LC-133 at Laguna Canyon Road.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	Approximately 78 percent of the samples are representative of wet weather conditions.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48185, Cadmium Laguna Canyon Channel

Region 9

LOE ID:	74088
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the 33 samples (7 at LC-133, 25 at LCWI02, 1 at SMC00531) exceeded the water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic pollutants in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L
Guideline Reference:	

Spatial Representation:	Samples were collected at the following stations: LC-133-Laguna Canyon Road LCWI02-Woodland Avenue SMC00531-1.5 miles above mouth
Temporal Representation:	Samples were collected between 2006 and 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48646	Region 9
Laguna Canyon Channel		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Chloride Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Basin Plan Objective for Chloride and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48646, Chloride	Region 9
Laguna Canyon Channel	

LOE ID:	74090
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Laguna Canyon Channel within the San Juan Hydrologic Unit is 400 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48649	Region 9
Laguna Canyon Channel		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the California Toxics Rule Objective for Chromium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 34 samples exceeded the California Toxics Rule Objective for Chromium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48649, Chromium	Region 9
Laguna Canyon Channel	

LOE ID:	74092
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 33 samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue, site SMC00531 at Laguna Canyon Channel, and site LC-133 at Laguna Canyon Road.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	Approximately 78 percent of the samples are representative of wet weather conditions.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48649, Chromium
Laguna Canyon Channel

Region 9

LOE ID:	74091
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48654	Region 9
Laguna Canyon Channel		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 34 samples exceeded the California Toxics Rule Objective for Copper and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 48654, Copper	Region 9
Laguna Canyon Channel	

LOE ID:	74093
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48654, Copper
Laguna Canyon Channel

Region 9

LOE ID:	74094
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 33 samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue, site SMC00531 at Laguna Canyon Channel, and site LC-133 at Laguna Canyon Road.

Temporal Representation:

The samples were collected from November 2006 to February 2009.

Environmental Conditions:

Approximately 78 percent of the samples are representative of wet weather conditions.

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.

QAPP Information Reference(s):

DECISION ID	48714	Region 9
Laguna Canyon Channel		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Cyfulthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Cyfulthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48714, Cyfluthrin	Region 9
Laguna Canyon Channel	

LOE ID: 74095

Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48716	Region 9
Laguna Canyon Channel		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Cyhalothrin, Lambda.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Cyhalothrin, Lambda and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48716, Cyhalothrin, Lambda
Laguna Canyon Channel**

Region 9

LOE ID:	74096
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48717

Region 9

Laguna Canyon Channel

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Cypermethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Cypermethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48717, Cypermethrin
Laguna Canyon Channel**

Region 9

LOE ID:	74097
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48719	Region 9
Laguna Canyon Channel		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Deltamethrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Deltamethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48719, Deltamethrin	Region 9
Laguna Canyon Channel	

LOE ID:	74098
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48720	Region 9
Laguna Canyon Channel		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

Single lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Esfenvalerate/Fenvalerate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Esfenvalerate/Fenvalerate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48720, Esfenvalerate/Fenvalerate	Region 9
Laguna Canyon Channel	

LOE ID:	74101
Pollutant:	Esfenvalerate/Fenvalerate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48742	Region 9
Laguna Canyon Channel		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Fenpropathrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Fenpropathrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48742, Fenpropathrin

Region 9

Laguna Canyon Channel

LOE ID:	74104
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

48743

Region 9

Laguna Canyon Channel

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Iron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Iron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48743, Iron
Laguna Canyon Channel**

Region 9

LOE ID:	74105
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Laguna Canyon Channel within the San Juan Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

DECISION ID	48744	Region 9
Laguna Canyon Channel		

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the California Toxics Rule Objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 34 samples exceeded the California Toxics Rule Objective for Lead and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48744, Lead	Region 9
Laguna Canyon Channel	

LOE ID: 74106

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48744, Lead
Laguna Canyon Channel**

Region 9

LOE ID:	74107
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 33 samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue, site SMC00531 at Laguna Canyon Channel, and site LC-133 at Laguna Canyon Road.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	Approximately 78 percent of the samples are representative of wet weather conditions.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

**DECISION ID 48745
Laguna Canyon Channel**

Region 9

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Manganese and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48745, Manganese Laguna Canyon Channel

Region 9

LOE ID:	74108
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Laguna Canyon Channel within the San Juan Hydrologic Unit is 0.05 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	62900	Region 9
Laguna Canyon Channel		

Pollutant: Mercury

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the Objective

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 62900, Mercury	Region 9
Laguna Canyon Channel	

LOE ID: 74109

Pollutant: Mercury

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	The sample was collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue.
Temporal Representation:	The samples was collected on 11/04/2008.
Environmental Conditions:	The sample was collected from a storm event.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	48746	Region 9
Laguna Canyon Channel		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the California Toxics Rule Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 34 samples exceeded the California Toxics Rule Objective for Nickel and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Laguna Canyon Channel

LOE ID:	74110
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48746, Nickel

Laguna Canyon Channel

LOE ID:	74111
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 33 samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue, site SMC00531 at Laguna Canyon Channel, and site LC-133 at Laguna Canyon Road.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	Approximately 78 percent of the samples are representative of wet weather conditions.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	48747	Region 9
Laguna Canyon Channel		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48747, Nitrogen, ammonia (Total Ammonia)	Region 9
Laguna Canyon Channel	

LOE ID:	74081
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia ' Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48748	Region 9
Laguna Canyon Channel		
Pollutant:	Oxygen, Dissolved	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the Basin Plan Objective for Oxygen, Dissolved.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>	

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 14 samples exceeded the Basin Plan Objective for Oxygen, Dissolved and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48748, Oxygen, Dissolved
Laguna Canyon Channel**

Region 9

LOE ID:	74112
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48748, Oxygen, Dissolved
Laguna Canyon Channel**

Region 9

LOE ID:	74113
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 13 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the LC-133 and LCWI02 stations.
Temporal Representation:	Samples were collected approximately four times semi-annually from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	48751	Region 9
Laguna Canyon Channel		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Permethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Water Quality Criteria for Permethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48751, Permethrin, total
Laguna Canyon Channel**

Region 9

LOE ID: 74114

Pollutant: Permethrin, total
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of one sample result was not used in the assessment because the laboratory data was detected, but not quantified, and the reporting limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**DECISION ID 48749
Laguna Canyon Channel**

Region 9

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 16

samples exceed the California Toxics Rule Objective for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 14 samples exceeded the California Toxics Rule Objective for Selenium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48749, Selenium
Laguna Canyon Channel**

Region 9

LOE ID:	74118
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the fifteen samples exceeded the water quality objective. The reporting limits for 18 of the 32 non-detect samples exceeded the objective and were not used in this assessment.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue, site SMC00531 at Laguna Canyon Channel, and site LC-133 at Laguna Canyon Road.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	Approximately 78 percent of the samples are representative of wet weather conditions.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48749, Selenium
Laguna Canyon Channel**

Region 9

LOE ID: 74117

Pollutant: Selenium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	48750	Region 9
Laguna Canyon Channel		

Pollutant: Silver
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Silver.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the California Toxics Rule Objective for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48750, Silver
Laguna Canyon Channel**

Region 9

LOE ID:	74119
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48752

Region 9

Laguna Canyon Channel

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48752, Sulfates**Region 9****Laguna Canyon Channel**

LOE ID:	74120
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Laguna Canyon Channel within the San Juan Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]

Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48753	Region 9
Laguna Canyon Channel		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Basin Plan Objective for Total Dissolved Solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Basin Plan Objective for Total Dissolved Solids and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48753, Total Dissolved Solids		Region 9
Laguna Canyon Channel		

LOE ID:	74123
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
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Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for

Data Reference: [Dissolved Solids. RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Laguna Canyon Channel within the San Juan Hydrologic Unit is 1000 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	48755	Region 9
Laguna Canyon Channel		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Turbidity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48755, Turbidity	Region 9
Laguna Canyon Channel	

LOE ID: 74127

Pollutant: Turbidity
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Laguna Canyon Channel within the San Juan Hydrologic Unit is 20 NTU.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 48756		Region 9
Laguna Canyon Channel		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the California Toxics Rule Objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of 34 samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48756, Zinc
Laguna Canyon Channel**

Region 9

LOE ID:	74129
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 33 samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue, site SMC00531 at Laguna Canyon Channel, and site LC-133 at Laguna Canyon Road.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	Approximately 78 percent of the samples are representative of wet weather conditions.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48756, Zinc
Laguna Canyon Channel**

Region 9

LOE ID:	74128
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48758	Region 9
Laguna Canyon Channel		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the Seven samples exceed the Basin Plan Objective for pH.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of Seven samples exceeded the Basin Plan Objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48758, pH
Laguna Canyon Channel**

Region 9

LOE ID:	74115
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Canyon Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Canyon Channel was collected at 1 monitoring site [Laguna Canyon ~1.5mi above Mouth - 901S00531]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48758, pH
Laguna Canyon Channel**

Region 9

LOE ID:	74116
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of 6 samples exceeded the objective.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the LC-133 station.
Temporal Representation:	Samples were collected approximately twice semi-annually from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	48645	Region 9
Laguna Canyon Channel		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects	Region 9
Laguna Canyon Channel	

LOE ID:	21399
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Laguna Canyon Creek station 901SJLAG2 from October 2002 to May 2003. The samples showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - four out of four samples were toxic. Ceriodaphnia dubia survival/reproductive test - Three of the four samples were toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2station 901SJLAG2. (Latitude 33.5726, Longitude -117.7629).
Temporal Representation:	Water samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID:	2994
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. All data points had no associated QA qualifiers (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All samples were collected from one station, Laguna Canyon Creek 2.
Temporal Representation:	Samples were collected from October 2002 through May 2003. Toxicity in the survival endpoint was detected in samples collected on October 29, 2002 and January 14, 2003.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID:	80738
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Of seven samples collected at two stations, four samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Three samples did not have scores calculated due to low organism counts.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at stations LC-133 and 901S00531
Temporal Representation:	The samples were collected from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program and the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID:	74124
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Either samples were collected to evaluate water toxicity. Three of the nine samples exhibited statistical and biological significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival, Hyallela survival and Selenastrum.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining if the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations LC-133 Laguna Canyon Channel.
Temporal Representation:	The samples were collected approximately quarterly from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID:	74125
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Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to test for toxicity. Four of the six samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Purple Urchin development and fertilization and Mysid Biomass and survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station LCWI02 Laguna Canyon Channel.
Temporal Representation:	The sample was collected from November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel**

Region 9

LOE ID:	74126
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S00531.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID:	72794
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six out of the six samples collected had IBI scores below 40. The samples were collected from one site over four years. The scores are fall 2006 22.9, spring 2007 12.9, fall 2007 21.5, spring 2008 5.7, fall 2008 21.5, and spring 2009 8.6.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	Samples were collected at station LC-133 Laguna Canyon Channel.
Temporal Representation:	The samples were collected in the fall and spring from 2006 to 2009.

Environmental Conditions:

QAPP Information:

The taxonomic analysis followed the guidelines of the Southern California Freshwater and Marine Invertebrate Taxonomic Associations (SAFIT, SCAMIT). All stream bioassessment sample collection and taxonomic analysis follow the Southern California Regional [Quality Assurance Project Plan for the Orange County Stormwater Program](#).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID: 74085

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: The IBI score for this water body was 3 which indicates that this water body may be considered to have impaired conditions.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at the following station: 901S00531-Laguna Canyon ~1.5mi above Mouth.

Temporal Representation: Surveys done May 7, 2009.

Environmental Conditions:

QAPP Information: Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID: 74109

Pollutant: Mercury
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	The sample was collected from site LCWI02 at Laguna Canyon Channel at Woodland Avenue.
Temporal Representation:	The samples was collected on 11/04/2008.
Environmental Conditions:	The sample was collected from a storm event.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects

Region 9

Laguna Canyon Channel

LOE ID:	9091
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Laguna Canyon Creek Station 2 (901SJLAG2) on October 2002, January 2003, April 2003, and May 2003 for California's Surface Water Ambient Monitoring Program. Two of the four samples showed excessive nitrogen concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007)
	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007)

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2 Station (901SJLAG2). (Latitude 33.5726, Longitude -117.7628).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 48645, Benthic Community Effects
Laguna Canyon Channel

Region 9

LOE ID:	9092
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Laguna Canyon Creek Station 2 (901SJLAG2) on October 2002, January 2003, April 2003, and May 2003 for California's Surface Water Ambient Monitoring Program. All four samples showed excessive phosphorus concentrations (SWAMP, 2007).
Data Reference:	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007)
	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2 Station (901SJLAG2). (Latitude 33.5726, Longitude -117.7628).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

48801

Region 9

Laguna Canyon Channel

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 15 samples exceed the Single Sample Maximum Objective and One out of One samples exceeded the Geomean objective for Enterococcus. Eight out of Fifteen samples exceeded the Single Sample Maximum Objective and One out of One samples exceeded the Geomean Objective for Fecal Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 15 samples exceed the Single Sample Maximum Objective and One out of One samples exceeded the Geomean objective for Enterococcus. Eight out of Fifteen samples exceeded the Single Sample Maximum Objective and One out of One samples exceeded the Geomean Objective for Fecal Coliform, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48801, Indicator Bacteria

Region 9

Laguna Canyon Channel

LOE ID: 74100

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: The one geomean exceeded the enterococcus objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean enterococcus concentration shall not exceed more than 33/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02, Laguna Canyon Channel at Woodland Avenue.
Temporal Representation:	The samples were collected in November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48801, Indicator Bacteria	Region 9
Laguna Canyon Channel	

LOE ID:	74103
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geomean exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean fecal coliform concentration shall not exceed more than 200/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02, Laguna Canyon Channel at Woodland Avenue.
Temporal Representation:	The samples were collected in November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48801, Indicator Bacteria	Region 9
Laguna Canyon Channel	

LOE ID:	74102
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the fifteen samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02, Laguna Canyon Channel at Woodland Avenue.
Temporal Representation:	The samples were collected in November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48801, Indicator Bacteria

Region 9

Laguna Canyon Channel

LOE ID:	74099
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifteen of the fifteen samples exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 61/100ml. Region 9 Basin Plan. Ambient Water Quality Criteria USEPA.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LCWI02, Laguna Canyon Channel at Woodland Avenue.
Temporal Representation:	The samples were collected in November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under sections 3.1 and 3.6 a single line of evidence is necessary to assess listing status.</p> <p>Two line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective and Four of the Four samples exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 4 samples exceed the water quality objective and Four of the Four samples exhibited water toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43194, Phosphorus	Region 9
Laguna Canyon Channel	

LOE ID:	21399
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Laguna Canyon Creek station 901SJLAG2 from October 2002 to May 2003. The samples showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - four out of four samples were toxic. Ceriodaphnia dubia survival/reproductive test - Three of the four samples were toxic.
Data Reference:	Monitoring data for Region 9

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2station 901SJLAG2. (Latitude 33.5726, Longitude -117.7629).
Temporal Representation:	Water samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 43194, Phosphorus

Region 9

Laguna Canyon Channel

LOE ID:	9092
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Laguna Canyon Creek Station 2 (901SJLAG2) on October 2002, January 2003, April 2003, and May 2003 for California's Surface Water Ambient Monitoring Program. All four samples showed excessive phosphorus concentrations (SWAMP, 2007).
Data Reference:	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2 Station (901SJLAG2). (Latitude 33.5726, Longitude -117.7628).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance

DECISION ID	43329	Region 9
Laguna Canyon Channel		

Pollutant:	Total Nitrogen as N
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the Four samples exceed the Basin Plan Objective for Total Nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Two of Four samples exceed the Basin Plan Objective for Total Nitrogen as N and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 43329, Total Nitrogen as N	Region 9
Laguna Canyon Channel	

LOE ID:	9091
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Laguna Canyon Creek Station 2 (901SJLAG2) on October 2002, January 2003, April 2003, and May 2003 for California's Surface Water Ambient Monitoring Program. Two of the four samples showed excessive nitrogen

Data Reference:	concentrations (SWAMP, 2007). Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Laguna Canyon Creek 2 Station (901SJLAG2). (Latitude 33.5726, Longitude -117.7628).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Aliso Creek](#)
Water Body ID: CAR9011300019990208093130
Water Body Type: River & Stream

DECISION ID	43129	Region 9
Aliso Creek		

Pollutant: Selenium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. Twelve of the 15 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 15 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43129, Selenium	Region 9
Aliso Creek	

LOE ID: 9076

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Aliso Creek station 901SJALC6 on October 2002, January, April, May 2003, three showed excessive selenium concentrations. Results are from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Aliso Creek station (901SJALC6).
Temporal Representation:	Data was collected on October 2002, January 2003, April 2003, May 2003.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43129, Selenium

Region 9

Aliso Creek

LOE ID:	72947
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 43129, Selenium

Region 9

Aliso Creek

LOE ID: 72948

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 10
Number of Exceedances: 8

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Eight of the ten samples exceed the criteria for selenium.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).

Temporal Representation: Samples were collected intermittently from stations: AC-CCR from May 2007 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.

Environmental Conditions: Approximately 50% of the samples were collected after a storm event.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID

46397

Region 9

Aliso Creek

Pollutant: Toxicity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown | Unknown Nonpoint Source | Unknown Point Source
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess pollutant. Fifteen of 47 samples exceed the water quality objective for Toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of 47 samples exceed the water quality objective for Toxicity and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.</p>

Line of Evidence (LOE) for Decision ID 46397, Toxicity

Region 9

Aliso Creek

LOE ID:	23504
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum Algae Growth- None of the 15 samples exhibited NOEC's less than 100%.</p> <p>Ceriodaphnia dubia -Survival- Two of the 15 samples exhibited NOEC's less than 100%.</p> <p>Ceriodaphnia dubia -Reproduction- Two of the 15 samples exhibited NOEC's less than 100%.</p> <p>Fathead Minnow survival- None of the three samples exhibited NOEC's less than 100%.</p> <p>Fathead Minnow growth- None of the three samples exhibited NOEC's less than 100%.</p> <p>Hyalella azteca survival- None of the 15 samples exhibited LC50's less than 100% according to results in the Orange County Storm Water Annual Progress Report, 2007. Samples were collected from 2003-2005.</p>
Data Reference:	Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be sustain free from toxic substances in concentrations that are toxic to, or that produce harmful physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration and significantly different than the control.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	There are three sampling locations along Aliso Creek. Sampling locations are Aliso/Woods Canyon Park, Country Club Road, and Pacific Park Dr.
Temporal Representation:	Samples were collected from 2003-2005.
Environmental Conditions:	
QAPP Information:	Quality control for the toxicity portion of this study was conducted in accordance with the County of Orange's NPDES monitoring program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

Line of Evidence (LOE) for Decision ID 46397, Toxicity

Region 9

Aliso Creek

LOE ID:	72956
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S01811.
Temporal Representation:	The sample was collected in May 2009.

Environmental Conditions:

QAPP Information:

All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46397, Toxicity

Region 9

Aliso Creek

LOE ID: 72955

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 31

Number of Exceedances: 13

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Thirty-one samples were collected to test for toxicity. Thirteen of the 31 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Fathead Minnow biomass and survival, Mysid biomass and survival, Purple Urchin development, Hyallela biomass and survival and survival and reproduction of Ceriodaphnia dubia.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.

Guideline Reference:

Spatial Representation: The samples were collected at stations AC-CCR, ACJ01, and AC-PPD Aliso Creek.

Temporal Representation: The samples were collected approximately twice a year from 2006 to 2009.

Environmental Conditions:

QAPP Information: The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46397, Toxicity

Region 9

Aliso Creek

LOE ID: 72940

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight of forty one samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Forty one samples were collected at Aliso Creek at sites ACJ01, AC-PPD and AC-CCR.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46397, Toxicity

Region 9

Aliso Creek

LOE ID:	72948
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Eight of the ten samples exceed the criteria for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from May 2007 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46397, Toxicity

Region 9

Aliso Creek

LOE ID:	4442
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

46398

Region 9

Aliso Creek

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 and 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant, one of which is a placeholder from 2006. Thirteen of the 14 samples for Enterococcus and 10 of 14 samples for Fecal Coliform exceed their corresponding objectives.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 14 samples for Enterococcus and 10 of 14 samples for Fecal Coliform exceed their corresponding objectives and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.</p>

Line of Evidence (LOE) for Decision ID 46398, Indicator Bacteria

Region 9

Aliso Creek

LOE ID:	72969
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the thirteen samples exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 61/100ml. Ambient Water Quality Criteria USEPA. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site ACJ01, Aliso Creek at Aliso / Wood Canyon Wilderness Park.
Temporal Representation:	The samples were collected in April and December of 2007 and January 2008 and February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.

Line of Evidence (LOE) for Decision ID 46398, Indicator Bacteria**Region 9****Aliso Creek**

LOE ID:	72970
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geomean exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean enterococcus concentration shall not exceed more than 33/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site ACJ01, Aliso Creek at Aliso / Wood Canyon Wilderness Park.
Temporal Representation:	The samples were collected in April and December of 2007 and January 2008 and February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46398, Indicator Bacteria**Region 9****Aliso Creek**

LOE ID:	4440
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46398, Indicator Bacteria

Region 9

Aliso Creek

LOE ID:	72973
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geomean exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean fecal coliform concentration shall not exceed more than 200/100ml.
Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site ACJ01, Aliso Creek at Aliso / Wood Canyon Wilderness Park.
Temporal Representation:	The samples were collected in April and December of 2007 and January 2008 and February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46398, Indicator Bacteria

Region 9

Aliso Creek

LOE ID:	72972
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	13
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the thirteen samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site ACJ01, Aliso Creek at Aliso / Wood Canyon Wilderness Park.
Temporal Representation:	The samples were collected in April and December of 2007 and January 2008 and February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	47599	Region 9
Aliso Creek		

Pollutant:	Alkalinity as CaCO₃
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample did not exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample did not exceed the evaluation guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Aliso Creek

LOE ID:	72925
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47600

Region 9

Aliso Creek

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47600, Aluminum

Region 9

Aliso Creek

LOE ID:	72926
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47601

Region 9

Aliso Creek

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 63 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment. No samples exhibited sediment toxicity because none were collected.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 63 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment and this sample size is sufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47601, Arsenic

Region 9

Aliso Creek

LOE ID:	72931
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 41 samples exceeded the water quality objective for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36

Objective/Criterion Reference:	(section 131.36 revised at 57 FR 60848, December 22, 1992). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from May 2007 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47601, Arsenic

Region 9

Aliso Creek

LOE ID:	72928
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47601, Arsenic

Region 9

Aliso Creek

LOE ID:	72929
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Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47601, Arsenic

Region 9

Aliso Creek

LOE ID:	72930
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 21 samples exceed the criteria for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from May 2007 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 47605		Region 9
Aliso Creek		
Pollutant:	Bifenthrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 47605, Bifenthrin		Region 9
Aliso Creek		
LOE ID:	72932	
Pollutant:	Bifenthrin	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47606	Region 9
Aliso Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6, two line(s) of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 42 samples exceed the water quality objective in water, and 0 of 1 sample exceeds the water quality objective in sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 42 samples exceed the water quality objective in water but 0 of 1 sample exceeds the water quality objective in sediment without an associated sediment toxicity line of evidence and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47606, Cadmium

Region 9

Aliso Creek

LOE ID:	72933
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47606, Cadmium

Region 9

Aliso Creek

LOE ID:	72915
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The Total number of samples collected is 41. 6 at AC-PPD (all dry weather) 7 at AC-CCR (all dry weather) 29 at ACJ01 (7 dry, 22 stormwater runoff influenced). If actual hardness values are used for calculations, there are 0 exceedances. ACJ01 4/21/07 16:46 - 895 mg/L CaCO3 (use 400) - Cd = 2.8 ug/L, which is < 6.2 ug/L ACJ01 1/23/08 17:56 - 960 mg/L CaCO3 (use 400) - Cd = 2.5 ug/L, which is < 6.2 ug/L
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from September 2006 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47606, Cadmium

Region 9

Aliso Creek

LOE ID:	72934
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula

Objective/Criterion Reference: for the metals criterion.
[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47610	Region 9
Aliso Creek		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47610, Chloride	Region 9
Aliso Creek	

LOE ID:	72916
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Aliso Creek within the San Juan Hydrologic Unit is 400 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47611	Region 9
Aliso Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 41 samples exceed the criteria for WARM freshwater aquatic life support and 0 of 38 samples exceed the criteria for municipal drinking water supply support.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 41 samples exceed the criteria for WARM freshwater aquatic life support and 0 of 38 samples exceed the criteria for municipal drinking water supply support and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47611, Chlorpyrifos

Region 9

Aliso Creek

LOE ID:	72918
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of forty one samples exceed the USEPA Health Advisory 2011 ed., criteria for chlorpyrifos.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA Health Advisory 2011 ed., criteria for chlorpyrifos in freshwater is 2.0 ug/L (represents a life-time risk).
Guideline Reference:	2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Samples were collected at Aliso Creek sites: ACJ01, AC-CCR and AC-PPD.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47611, Chlorpyrifos

Region 9

Aliso Creek

LOE ID:	72917
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of thirty eight samples exceed the continuous concentration for Chlorpyrifos criteria of 14.0 ng/L. However for three samples the reporting limit was greater than the evaluation

	guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L. Ref12
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Thirty eight samples were collected at Aliso Creek sites ACJ01, AC-PPD and AC-CCR.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data was submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	47612	Region 9
Aliso Creek		
Pollutant:	Chromium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 42 samples exceed the criteria for WARM freshwater aquatic life protection in water, 0 of 1 sample exceeds the criteria for WARM freshwater aquatic life protection in sediment, and 0 of 36 samples exceed the criteria for municipal drinking water in water. There were no samples collected for sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 42 samples exceed the criteria for WARM freshwater aquatic life protection in water, 0 of 1 sample exceeds the criteria for WARM freshwater aquatic life protection in sediment, and 0 of 36 samples exceed the criteria for municipal drinking water in water and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47612, Chromium
Aliso Creek**

Region 9

LOE ID:	72920
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47612, Chromium
Aliso Creek**

Region 9

LOE ID:	72922
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the 36 samples exceed the primary MCL for Cr.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The CDPH Primary MCL for chromium is 50 ug/L.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from May 2007 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47612, Chromium

Region 9

Aliso Creek

LOE ID:	72919
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47612, Chromium

Region 9

Aliso Creek

LOE ID:	72921
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 41 samples (6 @ AC-PPD, 6 @ AC-CCR, and 29 @ ACJ01) exceed the hardness adjusted criteria for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from September 2006 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

47617

Region 9

Aliso Creek

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 and 3.1 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 37 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment. No samples were collected for sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 37 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47617, Copper
Aliso Creek**

Region 9

LOE ID: 72963

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 36
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Zero of the 36 samples exceed the hardness adjusted criteria for dissolved copper.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness

dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from September 2006 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47617, Copper

Region 9

Aliso Creek

LOE ID:	72923
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47617, Copper

Region 9

Aliso Creek

LOE ID:	72924
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47619	Region 9
Aliso Creek		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47619, Cyfluthrin

Region 9

Aliso Creek

LOE ID:	72964
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47622

Region 9

Aliso Creek

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47622, Cyhalothrin, Lambda
Aliso Creek

Region 9

LOE ID:	72965
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:
QAPP Information Reference(s):

The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47623	Region 9
Aliso Creek		

Pollutant: Cypermethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47623, Cypermethrin	Region 9
Aliso Creek	

LOE ID: 72966

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47625	Region 9
Aliso Creek		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47625, Deltamethrin	Region 9
Aliso Creek	

LOE ID:	72967
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Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33824	Region 9
Aliso Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 45 samples exceed the water quality objective for the protection of the WARM Freshwater Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 45 samples samples exceeded the water quality objective for the protection of the WARM Freshwater Aquatic Life beneficial use and this does not exceed the allowable frequency listed in Table

3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33824, Diazinon

Region 9

Aliso Creek

LOE ID:	72968
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of forty samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Forty samples were collected at Aliso Creek at sites ACJ01, AC-PPD and AC-CCR.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33824, Diazinon

Region 9

Aliso Creek

LOE ID:	77979
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of forty one samples exceed the CADPH Notification Level for diazinon criteria.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Samples were collected at Aliso Creek sites: ACJ01, AC-CCR and AC-PPD.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33824, Diazinon

Region 9

Aliso Creek

LOE ID:	2995
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 4 samples exceeded the CDFG Hazard Assessment criteria. (TSMP, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination or pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CDFG Hazard Assessment criteria for the protection of Aquatic life is as follows: 0.16 ug/L 1-hour average and 0.10 ug/L 4-day average (Siepman & Finlayson, 2000; Finlayson, 2004).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were taken from one sample site at Aliso Creek: 33.51215 -117.75179
Temporal Representation:	Samples were collected from October 2002 through May 2003.
Environmental Conditions:	
QAPP Information:	SWAMP Quality Assurance Plan
QAPP Information Reference(s):	

DECISION ID	47624	Region 9
Aliso Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47624, Esfenvalerate/Fenvalerate	Region 9
Aliso Creek	

LOE ID:	72971
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47633	Region 9
Aliso Creek		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47633, Fenpropathrin	Region 9
Aliso Creek	

LOE ID:	72935
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47635	Region 9
Aliso Creek		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47635, Iron

Region 9

Aliso Creek

LOE ID: 72936

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Aliso Creek within the San Juan Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

47637

Region 9

Aliso Creek

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 37

samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment. No samples for sediment toxicity were collected.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 37 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47637, Lead

Region 9

Aliso Creek

LOE ID:	72939
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the 36 samples exceed the hardness adjusted criteria for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from May 2007 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47637, Lead

Region 9

Aliso Creek

LOE ID: 72937

Pollutant: Lead
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]

Temporal Representation: Data was collected on a single day 5/7/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47637, Lead

Region 9

Aliso Creek

LOE ID: 72938

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47704	Region 9
Aliso Creek		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47704, Manganese	Region 9
Aliso Creek	

LOE ID:	72942
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Aliso Creek within the San Juan Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47705		Region 9
Aliso Creek		
Pollutant:	Mercury	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 	

samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47705, Mercury

Region 9

Aliso Creek

LOE ID:	72943
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The one sample did not exceed the criteria for mercury.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Aliso Creek at Aliso / Wood Canyon Wilderness Park (ACJ01).
Temporal Representation:	Sample was collected on 11/4/2008
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

47706

Region 9

Aliso Creek

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of 42 samples exceed the criteria in water for WARM freshwater aquatic life, 0 of 1 sample exceeds the criteria in water for COMM, and 0 of 1 sample exceeds the criteria in sediment. No samples were collected for sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 42 samples exceed the criteria in water for WARM freshwater aquatic life, 0 of 1 sample exceeds the criteria in water for COMM, and 0 of 1 sample exceeds the criteria in sediment and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47706, Nickel

Region 9

Aliso Creek

LOE ID:	72958
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 41 samples exceed the hardness adjusted criteria for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from September 2006 through May 2009, ACJ01 from September 2006 through May 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47706, Nickel

Region 9

Aliso Creek

LOE ID:	72944
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47706, Nickel

Region 9

Aliso Creek

LOE ID:	72945
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47706, Nickel

Region 9

Aliso Creek

LOE ID:	72957
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Nickel criteria for the protection of human health from consumption of organisms only is 4.6 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:
QAPP Information Reference(s):

The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47709	Region 9
Aliso Creek		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47709, Nitrogen, ammonia (Total Ammonia)	Region 9
Aliso Creek	

LOE ID:	72927
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia â€™ Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47779	Region 9
Aliso Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 36 samples exceed the basin plan objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceed the basin plan objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47779, Oxygen, Dissolved	Region 9
Aliso Creek	

LOE ID: 72959

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47779, Oxygen, Dissolved

Region 9

Aliso Creek

LOE ID:	72960
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of the 35 samples exceeded the 5.0 mg/L objective, and since only 2 of the 35 samples were below 7.0 mg/L, more than 90% of the values were below 7.0 mg/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected from the AC-CCR, ACJ01, and AC-PPD stations.

Temporal Representation:

Samples were collected approximately 4 times every semi-annual period from September 2006 to April 2009.

Environmental Conditions:

QAPP Information:

NPDES quality assurance.

QAPP Information Reference(s):

DECISION ID

53337

Region 9

Aliso Creek

Pollutant:

Permethrin, total

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53337, Permethrin, total

Region 9

Aliso Creek

LOE ID:

72961

Pollutant:

Permethrin, total

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total

Beneficial Use:

Warm Freshwater Habitat

Number of Samples:

1

Number of Exceedances:

0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47781	Region 9
Aliso Creek		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 42 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 42 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47781, Silver	Region 9
Aliso Creek	

LOE ID:	72949
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47781, Silver

Region 9

Aliso Creek

LOE ID:	72950
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 41 samples exceed the criteria for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36

Objective/Criterion Reference:	(section 131.36 revised at 57 FR 60848, December 22, 1992). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from September 2006 through May 2009, ACJ01 from September 2006 through May 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47784	Region 9
Aliso Creek		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of 1 sample exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 1 sample exceeds the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47784, Sulfates	Region 9
Aliso Creek	

LOE ID:	72951
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Aliso Creek within the San Juan Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47786		Region 9
Aliso Creek		
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Total Dissolved Solids Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of 1 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 1 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 	

samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47786, Total Dissolved Solids

Region 9

Aliso Creek

LOE ID:	72954
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Aliso Creek within the San Juan Hydrologic Unit is 1000 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47789

Region 9

Aliso Creek

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47789, Turbidity
Aliso Creek**

Region 9

LOE ID:	72974
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Aliso Creek within the San Juan Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 41 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment. No samples exhibited sediment toxicity because none were collected.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient evidence against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 41 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment. No samples exhibited sediment toxicity because none were collected and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47790, Zinc	Region 9
Aliso Creek	
LOE ID:	72975
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47790, Zinc

Region 9

Aliso Creek

LOE ID:	72976
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47790, Zinc

Region 9

Aliso Creek

LOE ID:	72977
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Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 40 samples exceed the criteria for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from September 2006 through May 2009, ACJ01 from September 2006 through May 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47791	Region 9
Aliso Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 36 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47791, pH

Region 9

Aliso Creek

LOE ID:	72962
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47791, pH

Region 9

Aliso Creek

LOE ID:	72946
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 35 minimums and maximums of pH data had no exceedences.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the AC-CCR, ACJ01, and AC-PPD stations.
Temporal Representation:	Samples were collected approximately twice a month from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	44339	Region 9
Aliso Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.
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Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	7513
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All thirteen flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Storm Water Annual Progress Report, 2007. Samples were collected during two to six storm events a year from 2002-2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) has a goal of 0.1 mg/L. for phosphorus in streams and other flowing waters
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Aliso/Woods Canyon Park at 33.5437°N, 117.7325°W.
Temporal Representation:	Samples were collected during two to six storm events a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the toxicity portion of this study was conducted in accordance with the County of Orange's NPDES monitoring program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	7514
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Twelve of thirteen flow-weighted event mean concentrations exceeded the water quality

Data Reference:	objective according to results in the Orange County Storm Water Annual Progress Report, 2007. Samples were collected during two to six storm events a year from 2002-2006. Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) states: "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used." Since the goal for total phosphorus is 0.1 mg/L, then according to the ratio provided, the goal for total nitrogen is 1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Aliso/Woods Canyon Park at 33.5437°N, 117.7325°W.
Temporal Representation:	Samples were collected during two to six storm events a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the Orange County's NPDES Program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	80740
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	15
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty-two samples were collected from four stations in Aliso Creek. Fifteen of the samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Five samples did not have scores calculated due to low organism counts.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life.

Objective/Criterion Reference:	Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at stations, ACJ01, AC-CCR, AC-PPD and 901S01811
Temporal Representation:	The samples were collected from 2006 to 2009
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program. Data also collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	77582
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	18
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eighteen out of the eighteen IBI scores were below 40. Three stations were sampled six times each from 2006 to 2009. All of the IBI scores were below 20.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired

Guideline Reference:	conditions. Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	Samples were collected at stations, ACJ01: Aliso Creek near Wood Canyon Wilderness Park, AC-CCR: Aliso Creek near Camino Capistrano, and AC-PPD: Aliso Creek near Pacific Park.
Temporal Representation:	The samples were collected in the fall 2006, and the spring and fall of 2007 and 2008 and in the spring of 2009.
Environmental Conditions:	
QAPP Information:	The taxonomic analysis followed the guidelines of the Southern California Freshwater and Marine Invertebrate Taxonomic Associations (SAFIT, SCAMIT). All stream bioassessment sample collection and taxonomic analysis follow the Southern California Regional
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	72940
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight of forty one samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Forty one samples were collected at Aliso Creek at sites ACJ01, AC-PPD and AC-CCR.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	72947
Pollutant:	Selenium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Aliso Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aliso Creek was collected at 1 monitoring site [Aliso Creek ~0.7mi above Aliso Cr. Rd. - 901S01811]
Temporal Representation:	Data was collected on a single day 5/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	72948
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Eight of the ten samples exceed the criteria for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Spatial Representation:	Samples were collected from Aliso Creek at Camino Capistrano (AC-CCR), at Aliso / Wood Canyon Wilderness Park (ACJ01), and at Pacific Park (AC-PPD).
Temporal Representation:	Samples were collected intermittently from stations: AC-CCR from May 2007 through May 2009, ACJ01 from September 2006 through February 2009, and from AC-PPD from September 2006 through April 2009.
Environmental Conditions:	Approximately 50% of the samples were collected after a storm event.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	72754
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score for this site was 4.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected from Aliso Creek ~0.7mi above Aliso Cr. Rd.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	72955
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	13
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirty-one samples were collected to test for toxicity. Thirteen of the 31 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Fathead Minnow biomass and survival, Mysid biomass and survival, Purple Urchin development, Hyallella biomass and survival and survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations AC-CCR, ACJ01, and AC-PPD Aliso Creek.
Temporal Representation:	The samples were collected approximately twice a year from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	72956
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S01811.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	26347
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Thirteen samples of IBI data were taken from May 1998 to May 2001 at two sampling sites. Of the total number of samples, twelve samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 901ACPPDx and 901ACCCRx on Aliso Creek.

Temporal Representation:	Sampling occurred during one to three events annually over a four year period from May 1998 to May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44339, Benthic Community Effects

Region 9

Aliso Creek

LOE ID:	9076
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Aliso Creek station 901SJALC6 on October 2002, January, April, May 2003, three showed excessive selenium concentrations. Results are from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Aliso Creek station (901SJALC6).
Temporal Representation:	Data was collected on October 2002, January 2003, April 2003, May 2003.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	47640	Region 9
Aliso Creek		

Pollutant:	Malathion
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Eight of the forty-one samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of forty-one samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47640, Malathion

Region 9

Aliso Creek

LOE ID:	72941
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of forty one samples exceed the USEPA drinking water health advisory for malathion.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 µg/L.
Guideline Reference:	Water quality data for Temecula Creek, Murrieta Creek, and the Santa Margarita River, Temecula, CA 2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Samples were collected at Aliso Creek sites: ACJ01, AC-CCR and AC-PPD.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm

events.

QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47640, Malathion	Region 9
Aliso Creek	

LOE ID:	72940
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight of forty one samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Forty one samples were collected at Aliso Creek at sites ACJ01, AC-PPD and AC-CCR.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	34545	Region 9
Aliso Creek		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 13 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 13 samples exceed the Basin Plan criteria for phosphorus and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34545, Phosphorus

Region 9

Aliso Creek

LOE ID:	7513
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All thirteen flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Storm Water Annual Progress Report, 2007. Samples were collected during two to six storm events a year from 2002-2006.
Data Reference:	Orange County Stormwater Program, 2004-2007, Unified Annual Progress Reports, Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) has a goal of 0.1 mg/L. for phosphorus in streams and other flowing waters
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Aliso/Woods Canyon Park at 33.5437 Samples were collected at the mass loading station in Aliso/Woods Canyon Park at

Temporal Representation: 33.5437° , 117.7325°.

Environmental Conditions: Samples were collected during two to six storm events a year from 2002-2006.

QAPP Information: Samples were collected during wet weather.

QAPP Information Reference(s): Quality control for the toxicity portion of this study was conducted in accordance with the County of Orange's NPDES monitoring program.

[Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment \(San Diego Region\)](#)

DECISION ID	42917	Region 9
Aliso Creek		

Pollutant: Nitrogen

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status: Original

Sources: Source Unknown

Expected TMDL Completion Date: 2019

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twelve of the 13 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 13 samples exceed the objective, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42917, Nitrogen	Region 9
Aliso Creek	

LOE ID: 7514

Pollutant: Total Nitrogen as N

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 13

Number of Exceedances: 12

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Twelve of thirteen flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Storm Water Annual Progress Report, 2007. Samples were collected during two to six storm events a year from 2002-2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).</p> <p>The Water Quality Control Plan for the San Diego Basin (9) states: "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used." Since the goal for total phosphorus is 0.1 mg/L, then according to the ratio provided, the goal for total nitrogen is 1 mg/L.</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Aliso/Woods Canyon Park at 33.5437°N, 117.7325°W.
Temporal Representation:	Samples were collected during two to six storm events a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the Orange County's NPDES Program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [English Canyon](#)
Water Body ID: CAR9011300020050602203953
Water Body Type: River & Stream

DECISION ID	43273	Region 9
English Canyon		

Pollutant: Selenium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. Five of 8 samples exceed the criteria. Two of 8 samples exhibit water toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 8 samples exceed the criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43273, Selenium	Region 9
English Canyon	

LOE ID: 73665

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the four samples exceed the criteria for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43273, Selenium

Region 9

English Canyon

LOE ID:	73516
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to test for toxicity. two of the eight samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Hyallela survival and Fathead Minnow survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	

Spatial Representation:	The samples were collected at station EC-MD English Creek.
Temporal Representation:	The samples were collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43273, Selenium	Region 9
English Canyon	

LOE ID:	9090
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four samples were collected at English Canyon Creek 2, station 901SJENG2 on October 2002; January 2003; April 2003; and May 2003 Three of the four samples showed excessive phosphorus concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at English Canyon Creek station 2,(901SJENG2). (Latitude 33.6278, Longitude -117.6806).
Temporal Representation:	Samples were collected on October 2002; January 2003; April 2003; and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	33502	Region 9
English Canyon		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess pollutant. [NUMBER] of the [NUMBER] samples exceed the [OBJECTIVE/GUIDELINE/CRITERIA].</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [NUMBER] of [NUMBER] samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.</p>

Line of Evidence (LOE) for Decision ID 33502, Toxicity English Canyon

Region 9

LOE ID:	2999
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. All data points had no associated QA qualifiers (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: All samples were collected from one station, English Creek 2.
Temporal Representation: Samples were collected from October 2002 through May 2003. Toxicity in the survival endpoint was detected in samples collected on October 28, 2002 and January 13, 2003.
Environmental Conditions: English Canyon Creek is located in Hydrologic Unit 901.13.
QAPP Information: SWAMP QAPP.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33502, Toxicity
English Canyon

Region 9

LOE ID: 21398

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Four samples were collected at English Canyon Creek station 901SJENG2 from October 2002 to May 2003. They showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - two of the four samples. Ceriodaphnia dubia survival/reproductive test - three of the four samples.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013](#)
[Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001](#)

Spatial Representation: Water toxicity samples were collected at English Canyon Creek 2, station 901SJENG2; (Latitude 33.6278, Longitude -117.6806).

Temporal Representation: Water samples were collected on October 2002, January 2003, April 2003 and May 2003.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 33502, Toxicity

Region 9

English Canyon

LOE ID:	73516
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to test for toxicity. two of the eight samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Hyallela survival and Fathead Minnow survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at station EC-MD English Creek.
Temporal Representation:	The samples were collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

DECISION ID	48432	Region 9
English Canyon		
Pollutant:	Ammonia (Unionized)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 6 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>	

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 6 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48432, Ammonia (Unionized) English Canyon

Region 9

LOE ID:	73662
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of six samples did not exceeded the water quality objective for unionized ammonia. Data were reported as as total ammonia as nitrogen and were converted to unionized ammonia as nitrogen before being compared with the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Madera Drive.
Temporal Representation:	Samples were collected on 12/15/08.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 48433 English Canyon

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48433, Arsenic
English Canyon**

Region 9

LOE ID: 73622

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the four samples exceed the criteria for arsenic.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48435	Region 9
English Canyon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the WARM criteria and 0 of 6 samples exceed the MUN criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the WARM criteria and 0 of 6 samples exceed the MUN criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48435, Cadmium		Region 9
English Canyon		

LOE ID:	73632
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the six samples exceed the water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.
Guideline Reference:	
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48435, Cadmium

Region 9

English Canyon

LOE ID:	73631
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceed the hardness adjusted criteria for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48436	Region 9
English Canyon		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the WARM criteria and 0 of 6 samples exceed the MUN criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 6 samples exceed the WARM criteria and 0 of 6 samples exceed the MUN criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48436, Chlorpyrifos	Region 9
English Canyon	

LOE ID:	73634
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the USEPA Health Advisory 2011 ed., criteria for chlorpyrifos.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA Health Advisory 2011 ed., criteria for chlorpyrifos in freshwater is 2.0 ug/L (represents a life-time risk).
Guideline Reference:	2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Samples were collected at English Canyon site EC-MD.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48436, Chlorpyrifos English Canyon

Region 9

LOE ID:	73633
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the continuous concentration for Chlorpyrifos criteria of 14.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L.Ref12
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Six samples were collected at English Canyon site EC-MD.
Temporal Representation:	Samples were collected from 2006 to 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance

QAPP Information Reference(s):

DECISION ID	48440	Region 9
English Canyon		

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceed the WARM criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the WARM criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48440, Chromium	Region 9
English Canyon	

LOE ID: 73635

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the seven samples exceed the hardness adjusted criteria for chromium.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48441	Region 9
English Canyon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the WARM criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceed the WARM criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48441, Copper	Region 9
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English Canyon

LOE ID:	73645
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceed the hardness adjusted criteria for copper.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	33033	Region 9
English Canyon		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the criteria for the protection of the agricultural supply beneficial use, 0 of 6 samples exceed the criteria for the protection of municipal drinking water supply beneficial use, and 0 of 6 samples exceed the criteria for the protection of warm freshwater aquatic life beneficial use.</p>
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Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples exceed the criteria for the protection of the agricultural supply beneficial use, 0 of 6 samples exceed the criteria for the protection of municipal drinking water supply beneficial use, and 0 of 6 samples exceed the criteria for the protection of warm freshwater aquatic life beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33033, Diazinon
English Canyon**

Region 9

LOE ID:	77750
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the CDPH Notification Level for Diazinon criteria.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Samples were collected at English Canyon site EC-MD.
Temporal Representation:	Samples were collected from September 2006 through April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33033, Diazinon
English Canyon

Region 9

LOE ID:	2997
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Of the four samples, one exceeded the criteria. (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticides or combination of pesticides shall be present in the water column, sediments, or biota at concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CDFG Aquatic life Hazard Assessment Criteria 1-hour average 0.16 ug/L (Siepman & Finlayson, 2000; Finlayson, 2004).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One Station at English Creek: 33.62781 -117.68058
Temporal Representation:	Samples were collected from October 2002 through May 2003.
Environmental Conditions:	Aliso Creek Watershed 901.11.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33033, Diazinon
English Canyon

Region 9

LOE ID:	73646
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous

concentration (Finlayson, 2004).
[Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Guideline Reference:

Spatial Representation: Four samples were collected at English Canyon site EC-MD.
Temporal Representation: Samples were collected from 2006 to 2009.
Environmental Conditions: According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.

QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

DECISION ID 48442		Region 9
English Canyon		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 48442, Lead		Region 9
English Canyon		
LOE ID:	73647	
Pollutant:	Lead	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceed the hardness adjusted criteria for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48437	Region 9
English Canyon		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the WARM criteria and 0 of 6 samples exceed the MUN criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 6 samples exceed the WARM criteria and 0 of 6 samples exceed the MUN criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a 	

beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48437, Malathion

Region 9

English Canyon

LOE ID:	73648
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected at English Canyon site EC-MD.
Temporal Representation:	Samples were collected from 2006 to 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48437, Malathion

Region 9

English Canyon

LOE ID:	77751
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the CDPH notification level for Malathion criteria of 160.0 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) notification level criteria for malathion in drinking water is 160.0 ug/L.
Guideline Reference:	Water quality data for Temecula Creek, Murrieta Creek, and the Santa Margarita River, Temecula, CA
Spatial Representation:	Samples were collected at English Canyon site EC-MD.
Temporal Representation:	Samples were collected from September 2006 through April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID 48443		Region 9
English Canyon		
Pollutant:	Nickel	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and	

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48443, Nickel
English Canyon**

Region 9

LOE ID:	73661
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceed the hardness adjusted criteria for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 48446
English Canyon**

Region 9

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48446, Oxygen, Dissolved
English Canyon**

Region 9

LOE ID:	73663
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 7 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the EC-MD station.
Temporal Representation:	Samples were collected approximately semi-annually from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID

48444

Region 9

English Canyon

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 7 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48444, Silver English Canyon

Region 9

LOE ID:	73515
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceed the hardness adjusted criteria for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48445	Region 9
English Canyon		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48445, Zinc	Region 9
English Canyon	

LOE ID:	73517
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceed the hardness adjusted criteria for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48447	Region 9
English Canyon		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 6 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48447, pH English Canyon

Region 9

LOE ID:	73664
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of the 6 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the EC-MD station.
Temporal Representation:	Samples were collected approximately twice semi-annually from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 51688 English Canyon

Region 9

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. Bioassessment samples were collected at one station over a period of four years with all calculated scores exhibiting significant degradation. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information is available indicating that standards are being met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects
English Canyon

Region 9

LOE ID:	80741
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples were collected at one station. Five of the seven samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Two samples did not have scores calculated due to low organism counts.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by

comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference: [Development of a Benthic Index of Biotic Integrity \(B-IBI\) for Wadeable Streams in Northern Coastal California and its Application to Regional 305\(b\) Assessment](#)

Spatial Representation: Samples were collected at station EC-MD, English Creek near Madera Drive.
Temporal Representation: The samples were collected in the fall 2006, and the spring and fall of 2007 and 2008 and in the spring of 2009.

Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s): [Quality Assurance Project Plan for the Orange County Stormwater Program.](#)

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects English Canyon

Region 9

LOE ID: 9089

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Three of the four samples showed excessive phosphorus concentrations. The samples were collected at English Canyon Creek 2, station 901SJENG2 on October 2002; January 2003; April 2003; and May 2003. (SWAMP, 2007).
Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: As described in San Diego Basin Plan; inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at English Canyon Creek station 2(901SJENG2). (Latitude 33.6278, Longitude -117.6806).
Temporal Representation: Samples were collected on October 2002; January 2003; April 2003; and May 2003.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects

Region 9

English Canyon

LOE ID:	21398
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four samples were collected at English Canyon Creek station 901SJENG2 from October 2002 to May 2003. They showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - two of the four samples. Ceriodaphnia dubia survival/reproductive test - three of the four samples.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013 Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Water toxicity samples were collected at English Canyon Creek 2, station 901SJENG2; (Latitude 33.6278, Longitude -117.6806).
Temporal Representation:	Water samples were collected on October 2002, January 2003, April 2003 and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects

Region 9

English Canyon

LOE ID:	73665
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the four samples exceed the criteria for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from English Canyon at Madera Drive (EC-MD).
Temporal Representation:	Samples were collected from station EC-MD on 9/26/06, 5/30/07, 10/10/07, 5/13/08, 8/20/09, 09/30/08, and 4/28/09.
Environmental Conditions:	All the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects

Region 9

English Canyon

LOE ID:	2996
Pollutant:	Benzo[b]fluoranthene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four samples, two samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	California Toxic Rule: (water and organisms) 0.0044 Åµg/L.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One Station at English Creek: 33.62781 -117.68058.
Temporal Representation:	Samples were collected from October 2002 through May 2003.
Environmental Conditions:	Aliso Creek Watershed 901.11.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects**Region 9****English Canyon**

LOE ID:	2998
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four samples, three samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxic Rule-Human Health-FW (water and organisms) .00014 µg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One Station at English Creek: 33.62781 -117.68058
Temporal Representation:	Samples were collected from October 2002 through May 2003.
Environmental Conditions:	Aliso Creek Watershed 901.11.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects**Region 9****English Canyon**

LOE ID:	2999
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. All data points had no associated QA qualifiers (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of

species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

All samples were collected from one station, English Creek 2.

Temporal Representation:

Samples were collected from October 2002 through May 2003. Toxicity in the survival endpoint was detected in samples collected on October 28, 2002 and January 13, 2003.

Environmental Conditions:

English Canyon Creek is located in Hydrologic Unit 901.13.

QAPP Information:

SWAMP QAPP.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects

Region 9

English Canyon

LOE ID: 9090

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4

Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality: Four samples were collected at English Canyon Creek 2, station 901SJENG2 on October 2002; January 2003; April 2003; and May 2003 Three of the four samples showed excessive phosphorus concentrations (SWAMP, 2007).

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at English Canyon Creek station 2,(901SJENG2). (Latitude 33.6278, Longitude -117.6806).

Temporal Representation: Samples were collected on October 2002; January 2003; April 2003; and May 2003.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects

Region 9

English Canyon

LOE ID: 72791

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six out of the six samples collected had an IBI score below 40. The scores were, fall 2006: 4.3, spring 2007: 7.2, fall 2007: 15.7, spring 2008: 15.7, fall 2008: 0, spring 2009: 8.6.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	Samples were collected at station EC-MD, English Creek near Madera Drive.
Temporal Representation:	The samples were collected in the fall 2006, and the spring and fall of 2007 and 2008 and in the spring of 2009.
Environmental Conditions:	
QAPP Information:	The taxonomic analysis followed the guidelines of the Southern California Freshwater and Marine Invertebrate Taxonomic Associations (SAFIT, SCAMIT). All stream bioassessment sample collection and taxonomic analysis follow the Southern California Regional
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects
English Canyon

Region 9

LOE ID:	73516
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to test for toxicity. two of the eight samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Hyallela survival and Fathead Minnow survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at station EC-MD English Creek.
Temporal Representation:	The samples were collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51688, Benthic Community Effects
English Canyon

Region 9

LOE ID:	9088
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four samples were collected at English Canyon Creek station 901SJENG2 on October 2002; January 2003; April 2003; and May 2003, two of the four showed excessive nitrogen concentrations(SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at English Canyon Creek station 2,(901SJENG2). (Latitude 33.6278, Longitude -117.6806).
Temporal Representation:	Samples were collected on October 2002; January 2003; April 2003; and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey. CA

DECISION ID	42810	Region 9
English Canyon		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the 4 samples exceed the water quality objective.</p> <p>According to Table 3.1 of the Listing Policy the minimum sample requirement is five.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 4 samples exceeded the Basin Plan objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42810, Phosphorus	Region 9
English Canyon	

LOE ID:	9089
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three of the four samples showed excessive phosphorus concentrations. The samples were collected at English Canyon Creek 2, station 901SJENG2 on October 2002; January 2003; April 2003; and May 2003. (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	As described in San Diego Basin Plan; inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at English Canyon Creek station 2(901SJENG2). (Latitude 33.6278, Longitude -117.6806).
Temporal Representation:	Samples were collected on October 2002; January 2003; April 2003; and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	42811	Region 9
English Canyon		

Pollutant:	Total Nitrogen as N
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the four samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of four samples exceed the objective, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 42811, Total Nitrogen as N
English Canyon**

Region 9

LOE ID:	9088
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four samples were collected at English Canyon Creek station 901SJENG2 on October 2002; January 2003; April 2003; and May 2003, two of the four showed excessive nitrogen concentrations(SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at English Canyon Creek station 2,(901SJENG2). (Latitude 33.6278, Longitude -117.6806).
Temporal Representation:	Samples were collected on October 2002; January 2003; April 2003; and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

**DECISION ID 33516
English Canyon**

Region 9

Pollutant: Benzo[b]fluoranthene

Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 4 samples exceeded the CTR criteria for this pollutant and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33516, Benzo[b]fluoranthene English Canyon

Region 9

LOE ID:	2996
Pollutant:	Benzo[b]fluoranthene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four samples, two samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	California Toxic Rule: (water and organisms) 0.0044 Âµg/L.
Guideline Reference:	Placeholder reference 2006 303(d)

Spatial Representation:	One Station at English Creek: 33.62781 -117.68058.
Temporal Representation:	Samples were collected from October 2002 through May 2003.
Environmental Conditions:	Aliso Creek Watershed 901.11.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	33023	Region 9
English Canyon		

Pollutant:	Dieldrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the California Toxic Rule-Human Health-FW (water and organisms) .00014 mg/L.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 4 samples exceeded the CTR human health freshwater criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33023, Dieldrin	Region 9
English Canyon	

LOE ID:	2998
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four samples, three samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxic Rule-Human Health-FW (water and organisms) .00014 µg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One Station at English Creek: 33.62781 -117.68058
Temporal Representation:	Samples were collected from October 2002 through May 2003.
Environmental Conditions:	Aliso Creek Watershed 901.11.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Salt Creek \(Orange County\)](#)
Water Body ID: CAR9011400020011025104104
Water Body Type: River & Stream

DECISION ID	48619	Region 9
Salt Creek (Orange County)		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48619, Ammonia	Region 9
Salt Creek (Orange County)	

LOE ID: 75559
Pollutant: Ammonia (Unionized)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of six samples exceeded the water quality objective for unionized ammonia. Samples were reported as as total ammonia as nitrogen and were converted to unionized ammonia as nitrogen before being compared with the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected upstream Monarch Beach.
Temporal Representation:	Samples were collected from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 48629 Region 9	
Salt Creek (Orange County)	
Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48629, Arsenic
Salt Creek (Orange County)**

Region 9

LOE ID:	75548
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the water quality objective for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48635	Region 9
Salt Creek (Orange County)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective for protection of Aquatic Life and zero of five samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six and zero of five samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48635, Cadmium
Salt Creek (Orange County)**

Region 9

LOE ID:	75549
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the six samples exceeded the hardness adjusted water quality objectives for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

**Line of Evidence (LOE) for Decision ID 48635, Cadmium
Salt Creek (Orange County)**
Region 9

LOE ID:	75550
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None out of the five samples exceeded the water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 48636**Region 9****Salt Creek (Orange County)**

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective for protection of Aquatic Life and zero of six samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48636, Chlorpyrifos
Salt Creek (Orange County)**

Region 9

LOE ID:	75551
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the continuous concentration for Chlorpyrifos criteria of 14.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L. Ref12
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at Salt Creek site SC-MB.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48636, Chlorpyrifos

Region 9

Salt Creek (Orange County)

LOE ID:	77810
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the USEPA Health Advisory for chlorpyrifos.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA Health Advisory 2011 ed., criteria for chlorpyrifos in freshwater is 2.0 ug/L (represents a life-time risk).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at Salt Creek site SC-MB.
Temporal Representation:	Samples were collected from September 2006 through April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID 48623**Region 9****Salt Creek (Orange County)**

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>
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This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48623, Chromium
Salt Creek (Orange County)**

Region 9

LOE ID:	75552
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the six samples exceeded the hardness adjusted water quality objectives for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

48625

Region 9

Salt Creek (Orange County)

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48625, Copper

Region 9

Salt Creek (Orange County)

LOE ID: 75553

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the six samples exceeded the hardness adjusted water quality objectives for copper.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB) and at the mouth of Salt creek (SCM-1).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09, and from SCM-1 on 09/07/06, 12/27/06, 10/11/07, and 01/24/08.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48637	Region 9
Salt Creek (Orange County)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective for protection of Aquatic Life and zero of six samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48637, Diazinon	Region 9
Salt Creek (Orange County)	

LOE ID:	75554
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Samples were collected at Salt Creek at site SC-MB.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48637, Diazinon
Salt Creek (Orange County)

Region 9

LOE ID:	77811
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of six samples exceed the California Department of Public Health (CDPH) Notification Level.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Samples were collected at Salt Creek at site SC-MB.
Temporal Representation:	Samples were collected from September 2006 through April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID 48624		Region 9
Salt Creek (Orange County)		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 48624, Lead		Region 9
Salt Creek (Orange County)		
LOE ID:	75555	
Pollutant:	Lead	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the six samples exceeded the hardness adjusted water quality objectives for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48626	Region 9
Salt Creek (Orange County)		
Pollutant:	Nickel	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 	

16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48626, Nickel
Salt Creek (Orange County)**

Region 9

LOE ID:	75558
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 10 samples exceeded the hardness adjusted water quality objectives for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB) and at the mouth of Salt Creek (SCM-1).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09, and from SCM-1 on 09/07/06, 12/27/06, 10/11/07, and 01/24/08.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 48628
Salt Creek (Orange County)**

Region 9

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48628, Selenium
Salt Creek (Orange County)**

Region 9

LOE ID: 75562

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: The reporting limit for all six of the non-detect samples exceeded the water quality objective for selenium.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).

Temporal Representation: The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.

Environmental Conditions: The samples are representative of dry weather conditions.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	48620	Region 9
Salt Creek (Orange County)		

Pollutant: Silver

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48620, Silver	Region 9
Salt Creek (Orange County)	

LOE ID: 75563

Pollutant: Silver

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the six samples exceeded the hardness adjusted water quality objectives for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48622	Region 9
Salt Creek (Orange County)		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48622, Zinc
Salt Creek (Orange County)**

Region 9

LOE ID:	75565
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the six samples exceeded the hardness adjusted water quality objectives for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Salt Creek, upstream Monarch Beach (SC-MB).
Temporal Representation:	The samples were collected from SC-MB on 9/27/06, 5/31/07, 10/11/07, 5/14/08, 10/1/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 48630
Salt Creek (Orange County)**

Region 9

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 48630, pH
Salt Creek (Orange County)**

Region 9

LOE ID:	75560
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 6 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SC-MB station.
Temporal Representation:	Samples were collected approximately semi-annually from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 48640

Region 9

Salt Creek (Orange County)

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. One station was sampled over a four year period.3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48640, Benthic Community Effects Salt Creek (Orange County)

Region 9

LOE ID:	75564
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to test for toxicity. Three of the eight samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival and Hyallela biomass and survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	The sample was collected at stations SC-MB Salt Creek.
Temporal Representation:	The sample was collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48640, Benthic Community Effects
Salt Creek (Orange County)

Region 9

LOE ID:	72795
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six out of the six samples collected had an IBI score below 40. The scores were, fall 2006: 15.7, spring 2007: 5.7, fall 2007: 14.3, spring 2008: 1.4, fall 2008: 2.9, spring 2009: 0.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	Samples were collected at station SC-MB, Salt Creek near upstream Monarch Beach.

Temporal Representation:	The samples were collected in the fall 2006, and the spring and fall of 2007 and 2008 and in the spring of 2009.
Environmental Conditions:	
QAPP Information:	The taxonomic analysis followed the guidelines of the Southern California Freshwater and Marine Invertebrate Taxonomic Associations (SAFIT, SCAMIT). All stream bioassessment sample collection and taxonomic analysis follow the Southern California Regional
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 48640, Benthic Community Effects
Salt Creek (Orange County)

Region 9

LOE ID:	75556
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of ten samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected at Salt Creek, site SC-MB and at the mouth of Salt Creek (SCM-1)
Temporal Representation:	Samples were collected from 2006 through 2009
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48640, Benthic Community Effects
Salt Creek (Orange County)

Region 9

LOE ID:	80742
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven out of seven samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	Samples were collected at station SC-MB, Salt Creek near upstream Monarch Beach.
Temporal Representation:	The samples were collected in the fall 2006, and the spring and fall of 2007 and 2008 and in the spring of 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

DECISION ID	48639	Region 9
Salt Creek (Orange County)		
Pollutant:	Malathion	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Surface Runoff	
Expected TMDL Completion Date:	2027	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Four of the ten samples exceed the objective for protection of Aquatic Life.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the ten samples exceed the objective for protection of Aquatic Life.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48639, Malathion
Salt Creek (Orange County)**

Region 9

LOE ID:	75556
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of ten samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected at Salt Creek, site SC-MB and at the mouth of Salt Creek (SCM-1)
Temporal Representation:	Samples were collected from 2006 through 2009
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48639, Malathion
Salt Creek (Orange County)**

Region 9

LOE ID:	75564
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to test for toxicity. Three of the eight samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival and Hyallela biomass and survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	The sample was collected at stations SC-MB Salt Creek.
Temporal Representation:	The sample was collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

DECISION ID	48633	Region 9
Salt Creek (Orange County)		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Three of the 8 samples exceed the objective for water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 8 samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48633, Toxicity
Salt Creek (Orange County)**

Region 9

LOE ID:	75564
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to test for toxicity. Three of the eight samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival and Hyallela biomass and survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	The sample was collected at stations SC-MB Salt Creek.
Temporal Representation:	The sample was collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Oso Creek \(at Mission Viejo Golf Course\)](#)
Water Body ID: CAR9012000020010831150708
Water Body Type: River & Stream

DECISION ID	33319	Region 9
Oso Creek (at Mission Viejo Golf Course)		

Pollutant: Boron
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 13 samples exceed the Basin Plan water quality objective for Boron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 13 samples exceed the Basin Plan water quality objective for Boron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33319, Boron	Region 9
Oso Creek (at Mission Viejo Golf Course)	

LOE ID: 3001
Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Santa Margarita Water District in 1998-2001. None of the 13 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Boron is 0.75 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oso Creek at the Mission Viejo Golf Course.
Temporal Representation:	Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33124	Region 9
Oso Creek (at Mission Viejo Golf Course)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan water quality objective for pesticides and the California Department of Fish and Game (Siepman & Finlayson, 2000; Finlayson, 2004) for diazinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Basin Plan water quality objective for diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33124, Diazinon
Oso Creek (at Mission Viejo Golf Course)**

Region 9

LOE ID:	3005
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four samples with none exceeding the criteria. (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CDFG Aquatic life toxicity one hour acute average 0.16 ug/L and 4 day chronic average 0.10 ug/L. (Siepmann & Finlayson, 2000; Finlayson, 2004).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station at Oso Creek: 33.53484 -117.67616.
Temporal Representation:	Four samples collected from October 2002 through May 2003.
Environmental Conditions:	San Juan Creek Watershed: 901.21.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

**DECISION ID 33701
Oso Creek (at Mission Viejo Golf Course)**

Region 9

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.Â

One line of evidence is available in the administrative record to assess this pollutant.Â One of 12 of the samples exceed the Basin Plan water quality objective for flouride. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this

water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 12 of the samples exceed the Basin Plan water quality objective for flouride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33701, Fluoride
Oso Creek (at Mission Viejo Golf Course)**

Region 9

LOE ID:	3004
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Santa Margarita Water District from 1998 to 2001. One of 12 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oso Creek at the Mission Viejo Golf Course.
Temporal Representation:	Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 34925
Oso Creek (at Mission Viejo Golf Course)**

Region 9

Pollutant:	Chloride
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Twelve of 13 samples exceed the Basin Plan water quality objective for chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of 13 samples exceed the Basin Plan water quality objective for chloride and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 34925, Chloride
Oso Creek (at Mission Viejo Golf Course)**

Region 9

LOE ID:	3002
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Santa Margarita Water District in 1998-2001. Twelve of 13 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Oso Creek at the Mission Valley Golf Course.
Temporal Representation: Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33700	Region 9
Oso Creek (at Mission Viejo Golf Course)		

Pollutant:	Sulfates
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twelve of 13 samples exceed the Basin Plan water quality objective for sulfates.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 13 samples exceed the Basin Plan water quality objective for sulfates and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33700, Sulfates	Region 9
Oso Creek (at Mission Viejo Golf Course)	

LOE ID:	3003
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply

Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Santa Margarita Water District from 1998 to 2001. Twelve of 13 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Sulfate 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oso Creek at the Mission Viejo Golf Course.
Temporal Representation:	Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34850	Region 9
Oso Creek (at Mission Viejo Golf Course)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Thirteen of the 13 samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 13 samples exceed the Basin Plan water quality objective for total dissolved solids and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

**Line of Evidence (LOE) for Decision ID 34850, Total Dissolved Solids
Oso Creek (at Mission Viejo Golf Course)**

Region 9

LOE ID:	3000
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Santa Margarita Water District in 1998-2001. Thirteen of 13 water samples were in exceedance (San Diego RWQCB, 2002t).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters for the San Juan Hydrologic Unit, and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oso Creek at the Mission Viejo Golf Course.
Temporal Representation:	Samples were collected on a quarterly basis from 01/15/1998 to 01/02/2001.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Oso Creek \(lower\)](#)
Water Body ID: CAR9012000020010831154628
Water Body Type: River & Stream

DECISION ID	43534	Region 9
Oso Creek (lower)		

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Three of the four samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of four samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43534, Nitrogen	Region 9
Oso Creek (lower)	

LOE ID: 21400
Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Oso Creek station 901SJOSO3 from October 2002 to May 2003, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test: All four samples were toxic. Ceriodaphnia dubia survival/reproductive test : Two of the three samples were toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water toxicity samples were collected at Oso Creek station 3, 901SJOSO3; (Latitude 33.5348, Longitude -117.6762).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43534, Nitrogen Oso Creek (lower)

Region 9

LOE ID:	9095
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Oso Creek 3 Station 901SJOSO3 on October 2002, January 2003, April 2003, and May 2003, four of the four samples showed excessive nitrogen concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional

Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Water samples were collected at Oso Creek 3 Station (901SJOSO3). (Latitude 33.5348, Longitude -117.6762).

Temporal Representation:

Samples were collected on October 2002, January 2003, April 2003, and May 2003.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID	43302	Region 9
Oso Creek (lower)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.6 and 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. Three of the four samples exceed the Basin Plan water quality objective for phosphorus. In addition, four of four samples exhibited toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the four samples exceed the Basin Plan water quality objective for phosphorus and four of four samples exceed the toxicity objectives and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43302, Phosphorus	Region 9
Oso Creek (lower)	

LOE ID:	9093
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Oso Creek Station 901SJOSO3 on October 2002, January 2003, April 2003, and May 2003, three of the four samples showed excessive phosphorus concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Oso Creek 3 Station (901SJOSO3). (Latitude 33.5348, Longitude -117.6762).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43302, Phosphorus
Oso Creek (lower)

Region 9

LOE ID:	21400
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Oso Creek station 901SJOSO3 from October 2002 to May 2003, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test: All four samples were toxic. Ceriodaphnia dubia survival/reproductive test : Two of the three samples were toxic.
Data Reference:	Monitoring data for Region 9

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water toxicity samples were collected at Oso Creek station 3, 901SJOSO3; (Latitude 33.5348, Longitude -117.6762).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

DECISION ID	44429	Region 9
Oso Creek (lower)		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.6 and 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. Three of the four samples exceed the Basin Plan water quality objective for selenium. In addition, four of four samples exhibited toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the four samples exceed the Basin Plan water quality objective for selenium and four of four samples exceed the toxicity objectives and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44429, Selenium	Region 9
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Oso Creek (lower)

LOE ID:	9094
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Oso Creek Station 901SJOSO3 on October 2002, January 2003, April 2003, and May 2003, three of the four samples showed excessive phosphorus concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Oso Creek 3 Station (901SJOSO3). (Latitude 33.5348, Longitude -117.6762).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 44429, Selenium**Region 9****Oso Creek (lower)**

LOE ID:	21400
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Oso Creek station 901SJOSO3 from October 2002 to May 2003, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test: All four samples were toxic. Ceriodaphnia dubia survival/reproductive test : Two of the three samples were toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that

Objective/Criterion Reference:	produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water toxicity samples were collected at Oso Creek station 3, 901SJOSO3; (Latitude 33.5348, Longitude -117.6762).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 42685		Region 9
Oso Creek (lower)		
Pollutant:	Toxicity	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2021	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the Basin Plan water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the four samples exceed the Basin Plan water quality objective for toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>	
Line of Evidence (LOE) for Decision ID 42685, Toxicity		Region 9
Oso Creek (lower)		

LOE ID: 21400

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Oso Creek station 901SJOSO3 from October 2002 to May 2003, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test: All four samples were toxic. Ceriodaphnia dubia survival/reproductive test : Two of the three samples were toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water toxicity samples were collected at Oso Creek station 3, 901SJOSO3; (Latitude 33.5348, Longitude -117.6762).
Temporal Representation:	Samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Arroyo Trabuco Creek](#)
Water Body ID: CAR9012000020011025103603
Water Body Type: River & Stream

DECISION ID	42259	Region 9
Arroyo Trabuco Creek		

Pollutant: Diazinon
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; threatened water no longer threatened
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Since the Ban of Diazinon in 2006, zero of 41 samples exceeded the water quality criteria for the protection of aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Since the Ban of Diazinon in 2006, zero of 41 samples exceeded the water quality criteria for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 42259, Diazinon	Region 9
Arroyo Trabuco Creek	

LOE ID: 77712
Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of 22 samples exceed the CDPH Notification Level for Diazinon criteria.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Samples were collected at Arroyo Trabuco Creek: REF-TCAS, TC-DO, TCOLO2, TC-AP and SMC00206.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42259, Diazinon

Region 9

Arroyo Trabuco Creek

LOE ID:	21274
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All 6 samples taken exceeded the 0.17 Âµg/L limit for diazinon. Samples were collected six times from March 25, 1999 to February 23, 2000. Data was submitted into the Department of Pesticide Regulation's Surface Water Database .
Data Reference:	Department of Pesticide Regulation (DPR), 2003. Surface Water Database, April 2003. Accessed July 8, 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments of biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organism. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Diazinon is toxic to birds and aquatic life; especially invertebrates. The one-hour average concentration of diazinon should not exceed 0.17 Âµg/L more than once every three years on the average (acute criterion) and the four-day average concentration of diazinon should not exceed 0.17 Âµg/L more than once every three years on the average (chronic criterion).

Guideline Reference: (U.S. EPA, 2006).
[Fact Sheet: Final Recommended Aquatic Life Ambient Water Quality Criteria for Diazinon](#)

Spatial Representation: Samples were collected from the middle Trabuco Creek at Oso Parkway. Lat/Long: 33.5850/-117.6358.

Temporal Representation: Samples were taken on various dates starting March 25, 1999 to February 23, 2000.

Environmental Conditions:

QAPP Information: Data submitted to the DPR's Surface Water Database is subject to the document "Requirements for Inclusion of Monitoring Data in DPR's Surface Water Database."

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42259, Diazinon
Arroyo Trabuco Creek

Region 9

LOE ID: 73034

Pollutant: Diazinon
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 41
 Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
 Data Used to Assess Water Quality: None of forty one samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game](#)

Spatial Representation: Samples were collected at Arroyo Trabuco Creek, sites: REF-TCAS, TC-DO, TCOLO2, TC-AP and SMC00206.

Temporal Representation: Samples were collected from 2006 through 2009.

Environmental Conditions: According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.

QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown

QAPP Information Reference(s):

DECISION ID 42387
Arroyo Trabuco Creek

Region 9

Pollutant: Toxicity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess pollutant. Twelve of the 41 samples exceed the water quality objective for Toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 41 samples exceed the water quality objective for Toxicity and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 42387, Toxicity Arroyo Trabuco Creek

Region 9

LOE ID:	7732
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	From the four samples, there was no observed acute or chronic toxicity to <i>Hyalella azteca</i> , <i>Selenastrum</i> Algae Growth or <i>Ceriodaphnia dubia</i> . Toxicity data reviewed came from the Orange County Water Annual Progress Report from 2002 to 2006. Samples were collected from December 2002 through May 2005.
Data Reference:	Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be sustain free from toxic substances in concentrations that are toxic to, or that produce harmful physiological responses in human, plant, animal, or aquatic life. Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at two locations in Trabuco Creek. Samples were collected at the end of Avery Parkway (TC-AP) and at Del Obispo Rd (TC-DO).
Temporal Representation:	Samples were collected from December 2002 to May 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control documents for their stormwater monitoring program.
QAPP Information Reference(s):	Orange County Stormwater Program, 2004-2007, Unified Annual Progress Reports, Program Effectiveness Assessment (San Diego Region)

Line of Evidence (LOE) for Decision ID 42387, Toxicity

Region 9

Arroyo Trabuco Creek

LOE ID:	73023
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Six of the 27 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass and survival, Ceriodaphnia reproduction, and Selenastrum growth.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at stations REF-TCAS, TC-AP, TC-DO, and TCOL02 Trabuco Creek.
Temporal Representation:	The sample was collected from June 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42387, Toxicity

Region 9

Arroyo Trabuco Creek

LOE ID:	26272
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	One of the four samples collected show significant toxicity levels (SL) to <i>Hyalella azteca</i> according to results from the Surface Ambient Monitoring Program results (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA
Spatial Representation:	Water samples were collected at Trabucco Creek station Trabuco Creek 2, 901SJATC2 and Trabuco Creek 5, 901SJATC5.
Temporal Representation:	Water samples were collected on October 2002, January 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

Line of Evidence (LOE) for Decision ID 42387, Toxicity**Region 9****Arroyo Trabuco Creek**

LOE ID:	26224
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Five of the six samples collected show significant toxicity levels (SL). <i>Ceriodaphnia dubia</i> : Three of the six samples exhibited toxicity. <i>Selenastrum capricornutum</i> : Three of the six samples exhibited toxicity as determined by the <i>Ceriodaphnia dubia</i> survival/reproductive test (SWAMP, 2007).

Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA
Spatial Representation:	Samples were collected at two locations in Trabuco Creek. Samples were collected at the end of Trabuco Creek 5 (901 SJATC5) and Trabuco Creek 2 (901 SJATC2).
Temporal Representation:	Water samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

DECISION ID	47799	Region 9
Arroyo Trabuco Creek		
Pollutant:	Ammonia (Unionized)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Arroyo Trabuco Creek

LOE ID:	73004
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples exceed the water objective for un-ionized ammonia (NH ₃) at 0.025 mg/l (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The calculated un-ionized ammonia (as N) values was then established and compared to the un-ionized Ammonia (as N) at 0.025 mg/L in the RB9 Basin Plan. The data are reported as underneath the quantitation limit. These quantitation values are less than or equal to the water quality standard, the value will be considered as meeting the water quality standard, objective, criterion, or evaluation guideline.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH ₃) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 901PS0057 (Arroyo Trabuco 57).
Temporal Representation:	Samples collected on 5/14/2008.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47800

Region 9

Arroyo Trabuco Creek

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 37 samples exceed the criteria for WARM freshwater aquatic life and 0 of 45 samples exceed the objective for COLD freshwater aquatic life.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 37 samples exceed the criteria for WARM freshwater aquatic life and 0 of 45 samples exceed the objective for COLD freshwater aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47800, Arsenic

Region 9

Arroyo Trabuco Creek

LOE ID:	73006
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 45 samples exceeded the water quality objective for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek / Alder Spring (REF-TCAS).
Temporal Representation:	The samples were collected from REF-TCAS on 9/26/06, 6/1/07, 11/6/07, 5/20/08, and 4/30/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47800, Arsenic

Region 9

Arroyo Trabuco Creek

LOE ID:	73005
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 37 samples exceeded the water quality objective for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 47801		Region 9
Arroyo Trabuco Creek		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of 54 samples exceed the objective for WARM freshwater aquatic life and 1 of 40 samples exceed the objective for municipal drinking water supply.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 54 samples exceed the objective for WARM freshwater aquatic life and 1 of 40 samples exceed the objective for municipal drinking water supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47801, Cadmium

Region 9

Arroyo Trabuco Creek

LOE ID:	73026
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the 40 samples exceeded the water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.
Guideline Reference:	
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at the following sites: Alder Spring (REF-TCAS), Avery Parkway (TC-AP), and Del Obispo (TC-DO and TCOL02).
Temporal Representation:	The samples were collected from 9/26/06 and 4/30/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47801, Cadmium

Region 9

Arroyo Trabuco Creek

LOE ID:	73027
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the 54 samples exceeded the hardness adjusted water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47802	Region 9
Arroyo Trabuco Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 41 samples exceed the objective for municipal drinking water supply and 0 of 68 samples exceed the objective for WARM freshwater aquatic life.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 41 samples exceed the objective for municipal drinking water supply and 0 of 68 samples exceed the objective for WARM freshwater aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47802, Chlorpyrifos
Arroyo Trabuco Creek**

Region 9

LOE ID:	73029
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of 41 samples exceed the USEPA Health Advisory 2011 ed., criteria for chlorpyrifos.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA Health Advisory 2011 ed., criteria for chlorpyrifos in freshwater is 2.0 ug/L (represents a life-time risk).
Guideline Reference:	2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Samples were collected at Arroyo Trabuco Creek, sites: REF-TCAS, TC-DO, TCOLO2, TC-AP and SMC00206.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 47802, Chlorpyrifos
Arroyo Trabuco Creek**

Region 9

LOE ID:	73028
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of thirty-five samples exceed the continuous concentration for Chlorpyrifos criteria of 14.0 ng/L, however for six samples the reporting limit was greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L. Ref12
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at Arroyo Trabuco, sites: REF-TCAS, TC-DO, TCOLO2, TC-AP and SMC00206.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47802, Chlorpyrifos
Arroyo Trabuco Creek

Region 9

LOE ID:	73030
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of 33 samples exceed the continuous concentration for Chlorpyrifos criteria of 14.0 ng/L, however for two samples the reporting limit was greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

Objective/Criterion Reference:	sediments or biota at concentration(s) that adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L. Ref12
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Nineteen samples were collected at Segunda Deshecha Creek, sites: SD-AP and SDCM02
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	47803	Region 9
Arroyo Trabuco Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 54 samples exceed the objective for COLD freshwater aquatic life and 0 of 46 samples exceed the objective for municipal drinking water supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 54 samples exceed the objective for COLD freshwater aquatic life and 0 of 46 samples exceed the objective for municipal drinking water supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47803, Chromium	Region 9
Arroyo Trabuco Creek	

LOE ID: 73032

Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 46 samples exceeded the water quality objective for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The CDPH Primary MCL for chromium is 50 ug/L.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected from the following sites: REF-TCAS, TC-AP, TC-DO and TCOL02
Temporal Representation:	The samples were collected between 2006 and 2009.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47803, Chromium
Arroyo Trabuco Creek

Region 9

LOE ID:	73031
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 54 samples exceeded the hardness adjusted water quality objective for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47804	Region 9
Arroyo Trabuco Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of 41 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 41 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47804, Copper	Region 9
Arroyo Trabuco Creek	

LOE ID:	73033
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	2 of 41 samples collected for dissolved copper exceeded the hardness adjusted water quality objective for copper.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47805	Region 9
Arroyo Trabuco Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1, one line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of six samples exceeded the water quality guidelines for lead for the protection of aquatic life.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of six samples exceeded the water quality guidelines for lead for the protection of aquatic life

and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47805, Lead

Region 9

Arroyo Trabuco Creek

LOE ID:	73039
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of six samples exceeded the hardness adjusted water quality objective for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009. Data collected within seven days were averaged.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

63087

Region 9

Arroyo Trabuco Creek

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceed the water quality objective for mercury for the protection of aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the water quality objective for mercury for the protection of aquatic life and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 63087, Mercury Arroyo Trabuco Creek

Region 9

LOE ID:	73009
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	zero of two samples exceeded the water quality objective for mercury.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77

Guideline Reference: ug/L.
[National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology](#)

Spatial Representation: Samples were collected from Arroyo Trabuco Creek at Del Obispo (TCOL02) and at SMC00206.

Temporal Representation: Samples were collected from September 2006 through May of 2009.

Environmental Conditions:

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	47808	Region 9
Arroyo Trabuco Creek		

Pollutant: Nickel

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 54 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 54 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47808, Nickel	Region 9
Arroyo Trabuco Creek	

LOE ID: 73010

Pollutant: Nickel

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 54

Number of Exceedances: 0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 54 samples exceeded the hardness adjusted water quality objective for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47809	Region 9
Arroyo Trabuco Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. One of 34 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 34 samples exceed the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47809, Oxygen, Dissolved
Arroyo Trabuco Creek**

Region 9

LOE ID: 73012

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Numeric data generated from 1 sample of Dissolved Oxygen concentrations had 1 exceedences.
Data Reference: [Statewide Perennial Streams Assessment 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: One sample was collected from the 901PS0057 station.
Temporal Representation: One sample was collected in May 2008.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 47809, Oxygen, Dissolved
Arroyo Trabuco Creek**

Region 9

LOE ID: 73013

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: The sample collected did not exceed the objective.
Data Reference: [Statewide Ref Condition Management Plan 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the 901ATCAAS station.
Temporal Representation:	One sample was collected on 6/5/2008
Environmental Conditions:	
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47809, Oxygen, Dissolved
Arroyo Trabuco Creek

Region 9

LOE ID:	73011
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of the 32 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the REF-TCAS, TC-AP, TC-DO, and TCOL02 stations
Temporal Representation:	Samples were collected approximately 4 times every semi-annual period from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 47810
Arroyo Trabuco Creek

Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of 6 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 6 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47810, Selenium

Region 9

Arroyo Trabuco Creek

LOE ID: 73018

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 1

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: One of the six samples exceeded the water quality objective for selenium. Six non-detect samples had reporting limits greater than the criterion and were not used in this assessment.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority](#)

Spatial Representation: Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.

Temporal Representation: Samples were collected from September 2006 through May of 2009.

Environmental Conditions: Approximately half of the samples were collected after storm events.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	47811	Region 9
Arroyo Trabuco Creek		

Pollutant: Silver

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 54 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 54 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47811, Silver	Region 9
Arroyo Trabuco Creek	

LOE ID: 73019

Pollutant: Silver

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 54

Number of Exceedances: 0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 54 samples exceeded the hardness adjusted water quality objective for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47812	Region 9
Arroyo Trabuco Creek		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. One of 17 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 17 samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.2 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47812, Temperature, water
Arroyo Trabuco Creek**

Region 9

LOE ID: 73020

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 17
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of 17 samples exceeded the objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference: [Inland Fishes of California](#)

Spatial Representation: Samples were collected from the TC-AP, TC-DO and TCOL02 stations.
Temporal Representation: Samples were collected approximately thrice semi-annually from September 2006 to April 2009.

Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

DECISION ID 47813

Region 9

Arroyo Trabuco Creek

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 54 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 54 samples exceed the objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47813, Zinc
Arroyo Trabuco Creek**

Region 9

LOE ID:	73024
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 54 samples exceeded the hardness adjusted water quality objective for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately half of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47814	Region 9
Arroyo Trabuco Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 35 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 35 samples exceed the objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47814, pH	Region 9
Arroyo Trabuco Creek	

LOE ID:	73014
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 sample of pH data had no exceedences.
Data Reference:	Data for bacteria in various waterbodies, Feb. 2005-May 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from the Trabuco Creek station.
Temporal Representation: One sample was collected on 5/5/2007.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 47814, pH
Arroyo Trabuco Creek**

Region 9

LOE ID: 73015

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 33
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Numeric data generated from 33 minimums and maximums of pH data had no exceedences.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the REF-TCAS, SMC00206, TC-AP, TC-DO, and TCOL02 stations.
Temporal Representation: Samples were collected approximately twice a month from September 2006 to April 2009.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 47814, pH
Arroyo Trabuco Creek**

Region 9

LOE ID: 73016

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Numeric data generated from 1 sample collected had no exceedences.

Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters[,] the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the 901PS0057 station.
Temporal Representation:	One sample was collected in May 2008
Environmental Conditions:	
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47814, pH	Region 9
Arroyo Trabuco Creek	

LOE ID:	73017
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 0 samples exceed the water quality objective. The data are reported as non-detects and have been omitted from the sample count.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (SDRWQCB 2007): In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 901ATCAAS (Arroyo Trabuco).
Temporal Representation:	Sample collected 6/5/2008.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	45845	Region 9
Arroyo Trabuco Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. This listing does not apply to Upper Trabuco Creek within the National Forest as samples from those sites (n = 7) does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.</p>

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects
Arroyo Trabuco Creek

Region 9

LOE ID:	80749
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Fifteen samples were collected at five stations in lower Arroyo Trabuco downstream from the USFS boundary. Thirteen samples had CSCI scores below the 0.79 threshold, and are therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Statewide Perennial Streams Assessment 2008 Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of</p>

Objective/Criterion Reference:	species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations TC-DO, 901PS0057, TC-AP, SMC00206
Temporal Representation:	The samples were collected from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and for the SWAMP Statewide Perennial Streams Assessment 2008, and Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 Statewide Perennial Streams Assessment 2008 Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	21274
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All 6 samples taken exceeded the 0.17 $\mu\text{g/L}$ limit for diazinon. Samples were collected six times from March 25, 1999 to February 23, 2000. Data was submitted into the Department of Pesticide Regulation's Surface Water Database .
Data Reference:	Department of Pesticide Regulation (DPR), 2003. Surface Water Database, April 2003. Accessed July 8, 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments of biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organism. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Diazinon is toxic to birds and aquatic life; especially invertebrates. The one-hour average concentration of diazinon should not exceed 0.17 $\mu\text{g/L}$ more than once every three years on the average (acute criterion) and the four-day average concentration of diazinon should not exceed 0.17 $\mu\text{g/L}$ more than once every three years on the average (chronic criterion).

Guideline Reference: (U.S. EPA, 2006).
[Fact Sheet: Final Recommended Aquatic Life Ambient Water Quality Criteria for Diazinon](#)

Spatial Representation: Samples were collected from the middle Trabuco Creek at Oso Parkway. Lat/Long: 33.5850/-117.6358.

Temporal Representation: Samples were taken on various dates starting March 25, 1999 to February 23, 2000.

Environmental Conditions:

QAPP Information: Data submitted to the DPR's Surface Water Database is subject to the document "Requirements for Inclusion of Monitoring Data in DPR's Surface Water Database."

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects
Arroyo Trabuco Creek

Region 9

LOE ID: 73039

Pollutant: Lead
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6
 Number of Exceedances: 1

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
 Data Used to Assess Water Quality: One of six samples exceeded the hardness adjusted water quality objective for lead.
 Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from Arroyo Trabuco Creek at TC-AP Avery Parkway (TC-AP), at Del Obispo (TC-DO), at Del Obispo (TCOL02), at Trabuco Creek / Alder Spring (REF-TCAS), and at SMC00206.

Temporal Representation: Samples were collected from September 2006 through May of 2009. Data collected within seven days were averaged.

Environmental Conditions: Approximately half of the samples were collected after storm events.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects
Arroyo Trabuco Creek

Region 9

LOE ID: 80748

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples were collected at two stations in upper Arroyo Trabuco. All scored samples were above the 0.79 threshold, and therefore not exceeding the water quality objective for the aquatic life beneficial use. One sample was not scored due to low organism counts.
Data Reference:	Statewide Ref Condition Management Plan 2008 Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations 901ATCAAS and REF-TCAS.
Temporal Representation:	The samples were collected from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program and for the SWAMP Statewide Reference Condition Management Plan 2008.
QAPP Information Reference(s):	Statewide Ref Condition Management Plan 2008 Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	7733
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All nine flow-weighted event mean concentrations exceeded the water quality objective according to results in the the Orange County Stormwater Program annual progress reports. Samples were collected from December 2002 to March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) goal for phosphorus in streams and other flowing waters is 0.1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station TCOL02 at Del Obispo Street at 33.4975°N, 117.6657°W.
Temporal Representation:	Samples were collected from December 2002 to March 2006.
Environmental Conditions:	Samples were collected during storm events.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control documents for their stormwater monitoring program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	73023
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Six of the 27 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass and survival, Ceriodaphnia reproduction, and Selenastrum growth.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there

is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation:

The sample was collected at stations REF-TCAS, TC-AP, TC-DO, and TCOL02 Trabuco Creek.

Temporal Representation:

The sample was collected from June 2006 to April 2009.

Environmental Conditions:

QAPP Information:

The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID: 73007

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Water

Fraction: Not Recorded

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: The sample collected had an IBI score below 40. The IBI score was 16.

Data Reference: [Statewide Perennial Streams Assessment 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: The sample was collected at station, Arroyo Trabuco 57.

Temporal Representation: The sample was collected in May 2008.

Environmental Conditions:

QAPP Information: Samples were collected for the Statewide Perennial Streams Assessment 2008, following SWAMP protocols and stored in the SWAMP database.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	26224
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Five of the six samples collected show significant toxicity levels (SL). Ceriodaphnia dubia: Three of the six samples exhibited toxicity. Selenastrum capricornutum: Three of the six samples exhibited toxicity as determined by the Ceriodaphnia dubia survival/reproductive test (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA
Spatial Representation:	Samples were collected at two locations in Trabuco Creek. Samples were collected at the end of Trabuco Creek 5 (901 SJATC5) and Trabuco Creek 2 (901 SJATC2).
Temporal Representation:	Water samples were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	73008
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Six of forty-one exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected at Arroyo Trabuco Creek, sites: REF-TCAS, TC-DO, TCOLO2, TC-AP and SMC00206.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	73009
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	zero of two samples exceeded the water quality objective for mercury.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Arroyo Trabuco Creek at Del Obispo (TCOL02) and at SMC00206.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	73025
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The sample collected had an IBI score above 40. The IBI score was 52.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at station, Arroyo Trabuco.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Ref Condition Management Plan 2008, following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45845, Benthic Community Effects

Region 9

Arroyo Trabuco Creek

LOE ID:	26351
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight samples of IBI data were taken from September 1998 to June 2005 at two sampling sites. Of the total number of samples, four samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 901ATCAPx and 901ATCTCx on Arroyo Trabuco Creek.
Temporal Representation:	Sampling occurred during one to two events annually over a four year period from September 1998 to May 2001 and another event on June 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID	47816	Region 9
Arroyo Trabuco Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Data from 2007 and 2008 show that 11 of 11 and 8 of 11 single samples exceed the water quality objectives for single sample maximums of enterococcus and fecal coliform , respectively, for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Data from 2007 and 2008 show that 11 of 11 and 8 of 11 single samples exceed the water quality objectives for single sample maximums of enterococcus and fecal coliform , respectively, for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47816, Indicator Bacteria

Region 9

Arroyo Trabuco Creek

LOE ID:	73038
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geomean exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean fecal coliform concentration shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site TCOL02, Trabuco Creek at Del Obispo.
Temporal Representation:	The samples were collected from April 2007 to November 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47816, Indicator Bacteria

Region 9

Arroyo Trabuco Creek

LOE ID:	73037
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	8

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the eleven samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site TCOL02, Trabuco Creek at Del Obispo.
Temporal Representation:	The samples were collected from April 2007 to November 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47816, Indicator Bacteria

Region 9

Arroyo Trabuco Creek

LOE ID:	73036
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geomean exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geomeris mean enterococcus concentration shall not exceed more than 33/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site TCOL02, Trabuco Creek at Del Obispo.
Temporal Representation:	The samples were collected from April 2007 to November 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47816, Indicator Bacteria

Region 9

Arroyo Trabuco Creek

LOE ID:	73035
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eleven of the eleven samples exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 61/100ml. Region 9 Basin Plan. Ambient Water Quality Control Criteria USEPA.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site TCOL02, Trabuco Creek at Del Obispo.
Temporal Representation:	The samples were collected from April 2007 to November 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	47806	Region 9
Arroyo Trabuco Creek		

Pollutant:	Malathion
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Six of the forty-one samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of forty-one samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 47806, Malathion
Arroyo Trabuco Creek**

Region 9

LOE ID:	73008
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Six of forty-one exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected at Arroyo Trabuco Creek, sites: REF-TCAS, TC-DO, TCOLO2, TC-AP and SMC00206.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 47806, Malathion
Arroyo Trabuco Creek**

Region 9

LOE ID:	77711
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of 22 exceed the CDPH notification level for Malathion criteria of 160.0 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) notification level criteria for malathion in freshwater is 160.0 ug/L.
Guideline Reference:	Water quality data for Temecula Creek, Murrieta Creek, and the Santa Margarita River, Temecula, CA
Spatial Representation:	Samples were collected at Arroyo Trabuco Creek, sites:REF-TCAS, TC-DO, TCOLO2, TC-AP and SMC00206.
Temporal Representation:	Samples were collected from September 2006 through April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47806, Malathion

Region 9

Arroyo Trabuco Creek

LOE ID:	73023
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Six of the 27 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass and survival, Ceriodaphnia reproduction, and Selenastrum growth.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at stations REF-TCAS, TC-AP, TC-DO, and TCOL02 Trabuco

Temporal Representation:	Creek.
Environmental Conditions:	The sample was collected from June 2006 to April 2009.
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

DECISION ID	42285	Region 9
Arroyo Trabuco Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Eight of the nine samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of nine samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42285, Nitrogen	Region 9
Arroyo Trabuco Creek	

LOE ID:	7735
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	8

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Eight of nine flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Program annual progress reports. Samples were collected nine times from December 2002 to March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) states: "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used." Since the goal for total phosphorus is 0.1 mg/L, then according to the ratio provided, the goal for total nitrogen is 1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station at Del Obispo Street at 33.4975°N, 117.6657°W. Station identification number is TCOL02.
Temporal Representation:	Samples were collected during two to four storm events a year from December 2002 to March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control documents for their stormwater monitoring program.
QAPP Information Reference(s):	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

DECISION ID	34172	Region 9
Arroyo Trabuco Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Natural Sources Source Unknown Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Nine of the 9 samples exceed the phosphorus water quality objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 9 samples exceed the Basin Plan objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34172, Phosphorus

Region 9

Arroyo Trabuco Creek

LOE ID:	7733
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All nine flow-weighted event mean concentrations exceeded the water quality objective according to results in the the Orange County Stormwater Program annual progress reports. Samples were collected from December 2002 to March 2006.
Data Reference:	Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) goal for phosphorus in streams and other flowing waters is 0.1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station TCOL02 at Del Obispo Street at 33.4975°N, 117.6657°W.
Temporal Representation:	Samples were collected from December 2002 to March 2006.
Environmental Conditions:	Samples were collected during storm events.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control documents for their stormwater monitoring program.
QAPP Information Reference(s):	Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Juan Creek](#)
Water Body ID: CAR9012000020011025103828
Water Body Type: River & Stream

DECISION ID	33513	Region 9
San Juan Creek		

Pollutant: DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of 4 samples exceed the California Toxic Rule: Human Health-FW (water & organisms) criterion of 0.00059 µg/L. Zero of 2 samples exceed the guideline for sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 4 samples exceeded the California Toxic Rule: Human Health-FW (water & organisms) criterion of 0.00059 µg/L and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33513, DDE (Dichlorodiphenyldichloroethylene)	Region 9
San Juan Creek	

LOE ID: 3009
Pollutant: DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of 4 samples exceeded the CTR (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	California Toxic Rule: Human Health-FW (water & organisms) .00059 µg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	California Toxic Rule: Human Health-FW (water & organisms) 0.00059 µg/L.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station at San Juan Creek: 33.484429 -117.67577.
Temporal Representation:	Four samples collected from October 2002 through May of 2003.
Environmental Conditions:	San Juan Creek Watershed: 901.27.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33513, DDE (Dichlorodiphenyldichloroethylene)

Region 9

San Juan Creek

LOE ID:	75921
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 33513, DDE (Dichlorodiphenyldichloroethylene)

Region 9

San Juan Creek

LOE ID:	75920
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 41422

Region 9

San Juan Creek

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2019

Date:	
Impairment from Pollutant or Pollution:	Pollution
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Enterococcus 14 of 24 samples exceed the single sample objective for water contact recreation. 1 of 1 sample exceeds the geometric mean objective for water contact recreation.</p> <p>Escherichia coli 1 of 16 samples exceeded the single sample objective for water contact recreation.</p> <p>Fecal coliform Four of ten samples exceeds the single sample objective for water contact recreation. One of one sample exceeds the geometric mean objective for water contact recreation. The Indicator bacteria LOE is a placeholder to support a 303(d) listing decision made prior to 2006.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Samples and exceedences are as follows: Enterococcus 14 of 24 samples exceed the single sample objective for water contact recreation. 1 of 1 sample exceeds the geometric mean objective for water contact recreation. Escherichia coli 1 of 16 samples exceeded the single sample objective for water contact recreation. Fecal coliform Four of ten samples exceeds the single sample objective for water contact recreation. One of one sample exceeds the geometric mean objective for water contact recreation. The enterococcus samples exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 41422, Indicator Bacteria
San Juan Creek**

Region 9

LOE ID:	4726
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41422, Indicator Bacteria

Region 9

San Juan Creek

LOE ID:	75852
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the fourteen samples exceeded the objective for enterococcus.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The enterococcus concentration shall not exceed 61/100 ml Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Juan 1 and San Juan 2 located on San Juan Creek near the Ortega highway.
Temporal Representation:	Samples were collected from April 2009 to February 2010.
Environmental Conditions:	
QAPP Information:	This data was collected under the Quality Assurance Project Plan for Inland Empire Canyons Baseline Monitoring Project. qa13
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41422, Indicator Bacteria

Region 9

San Juan Creek

LOE ID:	75853
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 10 samples exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 61/100ml. Region 9 Basin Plan. Ambient Water Quality Criteria USEPA.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site SJNL01, San Juan Creek at La Novia.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41422, Indicator Bacteria
San Juan Creek

Region 9

LOE ID:	75854
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geometric mean exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean enterococcus concentration shall not exceed more than 33/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site SJNL01, San Juan Creek at La Novia.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41422, Indicator Bacteria

Region 9

San Juan Creek

LOE ID:	75855
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the sixteen samples exceeded the objective for E. coli.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E. coli concentration shall not exceed 235/100 ml Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Juan 1 and San Juan 2 located on San Juan Creek near the Ortega highway.
Temporal Representation:	Samples were collected from April 2009 to February 2010.
Environmental Conditions:	
QAPP Information:	This data was collected under the Quality Assurance Project Plan for Inland Empire Canyons Baseline Monitoring Project. qa13
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41422, Indicator Bacteria

Region 9

San Juan Creek

LOE ID:	75861
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the ten samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from site SJNL01, San Juan Creek at La Novia.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41422, Indicator Bacteria	Region 9
San Juan Creek	

LOE ID:	75862
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geomean exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean fecal coliform concentration shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site SJNL01, San Juan Creek at La Novia.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	43131	Region 9
San Juan Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Five of the 27 samples exceed the water quality criterion for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 27 samples exceed the selenium criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 43131, Selenium
San Juan Creek**

Region 9

LOE ID:	9096
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at San Juan station 901SJSJC9 on October 2002, January 2003, April 2003, and May 2003. Two of the four samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program.
Data Reference:	Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports, Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at San Juan Creek station (901SJSJC9).
Temporal Representation:	Samples for San Juan Creek were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43131, Selenium
San Juan Creek**

Region 9

LOE ID:	75969
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43131, Selenium

Region 9

San Juan Creek

LOE ID:	75968
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 43131, Selenium

Region 9

San Juan Creek

LOE ID: 75970

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 17

Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality: Two of the 17 samples exceeded the water quality objective for selenium. Two of the reporting limits for non-detect samples were greater than the water quality objective for selenium and were not used in the assessment.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)

Temporal Representation: Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.

Environmental Conditions: Approximately 54 percent of the samples were collected after storm events.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID 37571

Region 9

San Juan Creek

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. Twelve of the forty-four samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of forty-four samples exceeded the GUIDELINE and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37571, Toxicity	Region 9
San Juan Creek	

LOE ID:	7758
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum Algae Growth- None of the nine samples exhibited NOEC's less than 100%.
	Ceriodaphnia dubia -Survival- None of the nine samples exhibited NOEC's less than 100%.
	Ceriodaphnia dubia -Reproduction- None of the nine samples collected exhibited NOEC's less than 100%.
	Hyalella azteca survival- None of the nine samples exhibited LC50's less than 100% according to results in the

Data Reference:	Orange County Storm Water Program Annual Progress Report, 2002 - 2007. Samples were collected from 2003 - 2005. Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at two locations in San Juan Creek. Samples were collected at the Highway 74 and between Camino Capistrano and Interstate 5.
Temporal Representation:	Samples were collected from 2003-2005.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to the County of Orange's Quality Assurance Plan
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 37571, Toxicity

Region 9

San Juan Creek

LOE ID:	75923
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-five samples were collected to test for toxicity. Eight of the 25 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass, Ceriodaphnia reproduction and Selenastrum growth.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at stations REF-CS, SJC-74, SJC-CC, and SJNL01 San Juan Creek.
Temporal Representation:	The sample was collected from June 2006 to June 2010.

Environmental Conditions:

QAPP Information:

The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37571, Toxicity

Region 9

San Juan Creek

LOE ID: 75925

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation: The sample was collected at station 901SJSJC9.

Temporal Representation: The sample was collected in May 2008.

Environmental Conditions:

QAPP Information: Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37571, Toxicity

Region 9

San Juan Creek

LOE ID: 75924

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 901S06030 and 901S00313.
Temporal Representation:	The sample was collected in April 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37571, Toxicity
San Juan Creek

Region 9

LOE ID:	21401
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Eight samples were collected at San Juan Creek station 901SJSJC5 and 901SJSJC9 from October 2002 to May 2003, they showed significant toxicity levels (SL) in the following test: <i>Selenastrum</i> algae growth test - Four of eight samples were toxic.
	<i>Ceriodaphnia dubia</i> survival and reproduction: None of the samples were toxic.
	<i>Hyalella azteca</i> : One of six samples were toxic. Two additional tests were not valid.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that

Objective/Criterion Reference:	produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Water Toxicity Samples were collected at San Juan Creek stations 901SJSJC5 and 901SJSJC9
Temporal Representation:	Water samples were collected on September 2002, November 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37571, Toxicity
San Juan Creek**

Region 9

LOE ID:	75926
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901SUP068.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.

DECISION ID	49037	Region 9
San Juan Creek		

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49037, Alkalinity as CaCO₃	Region 9
San Juan Creek	

LOE ID: 75858
Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Alkalinity as CaCO₃.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49037, Alkalinity as CaCO3

Region 9

San Juan Creek

LOE ID:	75857
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

48754

Region 9

San Juan Creek

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48754, Aluminum

Region 9

San Juan Creek

LOE ID: 75864

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aluminum.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48754, Aluminum
San Juan Creek

Region 9

LOE ID:	75865
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51974**
San Juan Creek

Region 9

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eleven samples exceed the objective for Ammonia (unionized). Zero of two samples exceed the criterion for Nitrogen, ammonia (Total Ammonia)</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceeded the objective or criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51974, Ammonia San Juan Creek

Region 9

LOE ID:	75954
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 11 averaged samples exceeded the water quality objective for unionized ammonia. Samples were reported as as total ammonia as nitrogen and were converted to unionized ammonia as nitrogen before being compared with the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at stations REF-CS and SJNL01.
Temporal Representation:	Samples were collected from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51974, Ammonia

Region 9

San Juan Creek

LOE ID:	75866
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia ' Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51974, Ammonia

Region 9

San Juan Creek

LOE ID:	75867
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia ' Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48757	Region 9
San Juan Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Seven lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guidelines for the individual beneficial uses.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the guidelines for the individual beneficial uses. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48757, Arsenic
San Juan Creek**

Region 9

LOE ID:	75875
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48757, Arsenic
San Juan Creek**

Region 9

LOE ID:	75874
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48757, Arsenic

Region 9

San Juan Creek

LOE ID:	75873
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48757, Arsenic

Region 9

San Juan Creek

LOE ID: 75878

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 31
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the 31 samples exceeded the water quality objective for arsenic.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)

Temporal Representation: Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.

Environmental Conditions: Approximately 54 percent of the samples were collected after storm events.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48757, Arsenic

Region 9

San Juan Creek

LOE ID: 75868

Pollutant: Arsenic
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48757, Arsenic

Region 9

San Juan Creek

LOE ID:	75877
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 22 samples exceeded the water quality objective for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009. Approximately 54 percent of the samples were collected after storm events. Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 48757, Arsenic

Region 9

San Juan Creek

LOE ID: 75876

Pollutant: Arsenic

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 40411

Region 9

San Juan Creek

Pollutant: Benthic-Macroinvertebrate Bioassessments

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Only one line of evidence are available in the administrative record to assess this pollutant. Based on section 3.9 and the information submitted it cannot be determined if a pollutant is likely to cause or contribute to the toxic effect. California Stream Condition Index scores were not calculated for prior listing cycles.

Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 40411, Benthic-Macroinvertebrate Bioassessments

Region 9

San Juan Creek

LOE ID:	3008
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores ranged from 106 to 125, relatively higher compared to other sampled waterbodies. BMI ranking scores were near average (1 below, one above, and one at) compared to other sampled waterbodies. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No objective.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at in San Juan Creek, 5 riffles upstream of Highway 74 (SJC-74). Lat/Long coordinates are N33E31' 9.0"/W117E37' 25.4".
Temporal Representation:	Samples were collected in September and November 1998 and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 48759

Region 9

San Juan Creek

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the guideline for both water and sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of two samples exceeded the guideline for both water and sediment and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48759, Bifenthrin

Region 9

San Juan Creek

LOE ID:	75884
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48759, Bifenthrin**Region 9****San Juan Creek**

LOE ID:	75883
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48759, Bifenthrin**Region 9****San Juan Creek**

LOE ID:	75881
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48759, Bifenthrin

Region 9

San Juan Creek

LOE ID:	75882
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48774	Region 9
San Juan Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Seven lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guidelines for water or sediment.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero samples exceeded the guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48774, Cadmium	Region 9
San Juan Creek	

LOE ID:	75890
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 34 samples exceeded the hardness adjusted water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48774, Cadmium
San Juan Creek

Region 9

LOE ID:	75886
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48774, Cadmium

Region 9

San Juan Creek

LOE ID:	75887
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48774, Cadmium

Region 9

San Juan Creek

LOE ID:	75888
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48774, Cadmium
San Juan Creek

Region 9

LOE ID:	75889
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved

Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation:

Data was collected on a single day 4/30/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48774, Cadmium

Region 9

San Juan Creek

LOE ID:

75885

Pollutant:

Cadmium

LOE Subgroup:

Pollutant-Sediment

Matrix:

Sediment

Fraction:

Total

Beneficial Use:

Warm Freshwater Habitat

Number of Samples:

2

Number of Exceedances:

0

Data and Information Type:

PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:

Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.

Data Reference:

[RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:

SWAMP

Water Quality Objective/Criterion:

Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:

[Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation:

Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation:

Data was collected on a single day 4/30/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48774, Cadmium

Region 9

San Juan Creek

LOE ID:	75891
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 32 samples exceeded the water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.
Guideline Reference:	
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48775	Region 9
San Juan Creek		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceed the guideline and the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48775, Chlordane

Region 9

San Juan Creek

LOE ID:	72826
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 901SUP068 (San Juan Creek @ La Novia).
Temporal Representation:	The samples were collected on 1/7/2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48775, Chlordane

Region 9

San Juan Creek

LOE ID:	72832
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 901SJSJC9 (San Juan Creek 9).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48791	Region 9
San Juan Creek		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of two samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48791, Chloride
San Juan Creek**

Region 9

LOE ID:	75892
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48791, Chloride
San Juan Creek**

Region 9

LOE ID:	75893
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48862	Region 9
San Juan Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guidelines for the beneficial uses.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48862, Chlorpyrifos**Region 9****San Juan Creek**

LOE ID:	75896
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of twenty eight samples exceed the continuous concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L. However for five samples the reporting limit was greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at San Juan Creek, sites SJNL01, REF-CS, SJC-74 and SJC-CC.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48862, Chlorpyrifos**Region 9****San Juan Creek**

LOE ID:	75895
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was

	non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy Statewide Project Urban Pyrethroid Status Monitoring
Data Reference:	
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48862, Chlorpyrifos

Region 9

San Juan Creek

LOE ID:	75894
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 48862, Chlorpyrifos

Region 9

San Juan Creek

LOE ID:	77820
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of twenty samples exceed the USEPA Health Advisory 2011 ed., criteria for chlorpyrifos.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA Health Advisory 2011 ed., criteria for chlorpyrifos in freshwater is 2.0 ug/L (represents a life-time risk).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Samples were collected at San Juan Creek, sites REF-CS, SJC-74, SJCC-CC and SJNL01.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

48904

Region 9

San Juan Creek

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and

3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero samples exceed the guideline/criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero samples exceeded the guideline/criteria for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48904, Chromium
San Juan Creek**

Region 9

LOE ID:	75897
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48904, Chromium

Region 9

San Juan Creek

LOE ID: 75898

Pollutant: Chromium
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48904, Chromium

Region 9

San Juan Creek

LOE ID: 75899

Pollutant: Chromium
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48904, Chromium

Region 9

San Juan Creek

LOE ID:	75900
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48904, Chromium
San Juan Creek

Region 9

LOE ID:	75902
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 34 samples exceeded the hardness adjusted water quality objective for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48904, Chromium
San Juan Creek

Region 9

LOE ID:	75901
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Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48910	Region 9
San Juan Creek		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Two of the 36 samples exceed the aquatic life criteria. None of the other samples exceeded the guideline/criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>	

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 36 samples exceeded the aquatic life criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48910, Copper
San Juan Creek**

Region 9

LOE ID:	75905
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 48910, Copper
San Juan Creek**

Region 9

LOE ID:	75904
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Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48910, Copper

Region 9

San Juan Creek

LOE ID:	75903
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48910, Copper
San Juan Creek**

Region 9

LOE ID:	75908
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the 34 samples exceeded the hardness adjusted water quality objective for copper.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48910, Copper

Region 9

San Juan Creek

LOE ID:	75907
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48910, Copper

Region 9

San Juan Creek

LOE ID:	75906
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper

Objective/Criterion Reference: to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	48912	Region 9
San Juan Creek		

Pollutant: Cyfluthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48912, Cyfluthrin	Region 9
San Juan Creek	

LOE ID: 75911

Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin, total. Two sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48912, Cyfluthrin
San Juan Creek**

Region 9

LOE ID:	75910
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin, total. Two sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48912, Cyfluthrin

Region 9

San Juan Creek

LOE ID:	77821
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972. with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

Line of Evidence (LOE) for Decision ID 48912, Cyfluthrin

Region 9

San Juan Creek

LOE ID: 75909

Pollutant: Cyfluthrin
 LOE Subgroup: Pollutant-Sediment
 Matrix: Sediment
 Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
 Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
 Guideline Reference: [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID

48917

Region 9

San Juan Creek

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for

pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48917, Cyhalothrin, Lambda
San Juan Creek**

Region 9

LOE ID:	75912
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]

Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48917, Cyhalothrin, Lambda
San Juan Creek

Region 9

LOE ID:	75913
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48917, Cyhalothrin, Lambda
San Juan Creek

Region 9

LOE ID:	75914
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48917, Cyhalothrin, Lambda
San Juan Creek**

Region 9

LOE ID:	77822
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	48919	Region 9
San Juan Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48919, Cypermethrin		Region 9
San Juan Creek		

LOE ID:	75915
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48919, Cypermethrin
San Juan Creek

Region 9

LOE ID:	75916
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of two sample results were not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

Guideline Reference:	average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012) Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48919, Cypermethrin
San Juan Creek

Region 9

LOE ID:	75917
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of two sample results were not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48919, Cypermethrin
San Juan Creek

Region 9

LOE ID:	77823
Pollutant:	Cypermethrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48466	Region 9
San Juan Creek		
Pollutant:	DDD (Dichlorodiphenyldichloroethane)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the sediment guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48466, DDD (Dichlorodiphenyldichloroethane)

Region 9

San Juan Creek

LOE ID:	75919
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48466, DDD (Dichlorodiphenyldichloroethane)

Region 9

San Juan Creek

LOE ID:	75918
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Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	49031	Region 9
San Juan Creek		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane) Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49031, Multiple Pollutants

Region 9

San Juan Creek

LOE ID:	75982
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 49031, Multiple Pollutants

Region 9

San Juan Creek

LOE ID: 75842

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 49031, Multiple Pollutants

Region 9

San Juan Creek

LOE ID:	75922
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49031, Multiple Pollutants

Region 9

San Juan Creek

LOE ID:	75981
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID
San Juan Creek

48992

Region 9

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the sediment or water guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the sediment and water guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48992, Deltamethrin San Juan Creek

Region 9

LOE ID:	77815
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA, State Water Resources Control Board, SWAMP, December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48992, Deltamethrin
San Juan Creek

Region 9

LOE ID:	75843
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48992, Deltamethrin
San Juan Creek

Region 9

LOE ID:	75844
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Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48992, Deltamethrin San Juan Creek

Region 9

LOE ID:	75845
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board, SWAMP. December 2002 (1st version)

DECISION ID	43102	Region 9
San Juan Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the fifty-nine water samples exceed the GUIDELINE and zero of the two sediment samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of fifty-nine water samples exceeded the GUIDELINE and zero of two sediment samples exceed the GUIDELINE, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43102, Diazinon	Region 9
San Juan Creek	

LOE ID: 77817

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of 14 samples exceed the CADPH Notification Level for Diazinon criteria.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Samples were collected at San Juan Creek, sites REF-CS, SJC-74, SJCC-CC and SJNL01.
Temporal Representation:	Samples were collected from September 2006 through April 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43102, Diazinon

Region 9

San Juan Creek

LOE ID:	75847
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of thirty three samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game

Spatial Representation:	Samples were collected at San Juan Creek, sites REF-CS, SJC-74, SJCC-CC and SJNL01.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43102, Diazinon	Region 9
San Juan Creek	

LOE ID:	21244
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	There were no exceedances in the data, the four samples taken have a mean of 0.036 Åµg/L. according to results in the Surface Water Ambient Monitoring Program, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The one-hour average concentration of diazinon should not exceed 0.17 Åµg/L more than once every three years on the average (acute criterion) and the four-day average concentration of diazinon should not exceed 0.17 Åµg/L more than once every three years on the average (chronic criterion). (U.S. EPA, 2006)
Guideline Reference:	Fact Sheet: Final Recommended Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	The four samples were collected in the lower San Juan Creek Station; Lat/Long: 33.4847/-117.6746.
Temporal Representation:	This site was monitored in 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43102, Diazinon	Region 9
San Juan Creek	

LOE ID:	77816
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43102, Diazinon

Region 9

San Juan Creek

LOE ID:	75846
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water

Guideline Reference:	quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43102, Diazinon

Region 9

San Juan Creek

LOE ID:	21242
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the 17 samples exceeded 0.17 $\mu\text{g/L}$.
Data Reference:	California Stream Bioassessment Procedure: Protocol Brief for Biological and Physical/Habitat Assessment in Wadeable Streams
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The one-hour average concentration of diazinon should not exceed 0.17 $\mu\text{g/L}$ more than once every three years on the average (acute criterion) and the four-day average concentration of diazinon should not exceed 0.17 $\mu\text{g/L}$ more than once every three years on the average (chronic criterion). (U.S. EPA, 2006)
Guideline Reference:	Fact Sheet: Final Recommended Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Samples were collected from the lower San Juan Creek at Stonehill Drive. Latitude/Longitude: 33.4753/ -117.6790
Temporal Representation:	Samples were taken on various dates starting April 8, 1999 to January 17, 2001.
Environmental Conditions:	
QAPP Information:	None available. Data submitted to the DPR's Surface Water Database is subject to the document "Requirements for Inclusion of Monitoring Data in DPR's Surface Water Database."
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43102, Diazinon

Region 9

San Juan Creek

LOE ID:	21253
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Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	There were no exceedances in the five samples collected according to results in the Unified Annual Progress Report Program Effectiveness Assessment, 2007. Samples were taken on five dates: October 10, 2003; May 13, 2004; October 14, 2004; May 18, 2005; December 14, 2005.
Data Reference:	Program Effectiveness Assessment Section of the Unified Annual Progress Report for the period of time 2001-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The one-hour average concentration of diazinon should not exceed 0.17 Åµg/L more than once every three years on the average (acute criterion) and the four-day average concentration of diazinon should not exceed 0.17 Åµg/L more than once every three years on the average (chronic criterion). (U.S. EPA, 2006)
Guideline Reference:	Fact Sheet: Final Recommended Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Samples were collected from lower San Juan Creek at Camino Capistrano. Latitude/Longitude: 33.4978/ -117.6661.
Temporal Representation:	Samples were taken on five dates: October 10, 2003; May 13, 2004; October 14, 2004; May 18, 2005; December 14, 2005.
Environmental Conditions:	
QAPP Information:	Quality assurance plan followed guidelines outlined by the County of Orange.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

DECISION ID	48925	Region 9
San Juan Creek		

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the sediment guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48925, Dieldrin
San Juan Creek**

Region 9

LOE ID:	75849
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48925, Dieldrin

Region 9

San Juan Creek

LOE ID:	75848
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48929	Region 9
San Juan Creek		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d)</p>
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List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the sediment guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48929, Endrin

Region 9

San Juan Creek

LOE ID:	75851
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48929, Endrin

Region 9

San Juan Creek

LOE ID: 75850

Pollutant: Endrin
 LOE Subgroup: Pollutant-Sediment
 Matrix: Sediment
 Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
 Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
 Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
 Temporal Representation: Data was collected on a single day 1/7/2007.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.
 QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	48933	Region 9
San Juan Creek		

Pollutant: Esfenvalerate/Fenvalerate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the sediment or water guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d)

List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the sediment and water guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48933, Esfenvalerate/Fenvalerate
San Juan Creek**

Region 9

LOE ID:	75859
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48933, Esfenvalerate/Fenvalerate
San Juan Creek**

Region 9

LOE ID:	75860
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 48933, Esfenvalerate/Fenvalerate
San Juan Creek**

Region 9

LOE ID:	75856
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48933, Esfenvalerate/Fenvalerate

Region 9

San Juan Creek

LOE ID:	77818
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48936	Region 9
San Juan Creek		

Pollutant: Fenpropathrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the sediment or water guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the sediment and water guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48936, Fenpropathrin	Region 9
San Juan Creek	

LOE ID: 75870
Pollutant: Fenpropathrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 2
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fenpropathrin.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48936, Fenpropathrin
San Juan Creek

Region 9

LOE ID:	75869
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48936, Fenpropathrin
San Juan Creek

Region 9

LOE ID:	75863
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48936, Fenpropathrin
San Juan Creek

Region 9

LOE ID:	77819
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48941	Region 9
San Juan Creek		

Pollutant:	Fipronil
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples were used in the assessment due to method detection limits that were above the guideline.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48941, Fipronil	Region 9
San Juan Creek	

LOE ID:	75871
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48944		Region 9
San Juan Creek		
Pollutant:	Fipronil Sulfide	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the guidelines.</p>	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples were used in the assessment due to method detection limits that were above the guideline.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48944, Fipronil Sulfide
San Juan Creek**

Region 9

LOE ID:	75872
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Pollutant:	Fipronil Sulfone
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples were used in the assessment due to method detection limits that were above the guideline. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48945, Fipronil Sulfone		Region 9
San Juan Creek		
LOE ID:	75935	
Pollutant:	Fipronil Sulfone	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Cold Freshwater Habitat	
Number of Samples:	0	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.	
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring	
SWAMP Data:	SWAMP	

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48947	Region 9
San Juan Creek		
Pollutant:	Iron	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of two samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 48947, Iron		Region 9
San Juan Creek		

LOE ID:	75937
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48947, Iron
San Juan Creek

Region 9

LOE ID:	75936
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 0.3 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	48995	Region 9
San Juan Creek		

Pollutant: **Lead**

Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Six lines of evidence are available in the administrative record to assess this pollutant. One of the 36 samples exceeded the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 36 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48995, Lead	Region 9
San Juan Creek	

LOE ID: 75940

Pollutant: Lead

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48995, Lead

Region 9

San Juan Creek

LOE ID:	75941
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San

Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48995, Lead

Region 9

San Juan Creek

LOE ID: 75942

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 34
Number of Exceedances: 1

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: One of the 34 samples exceeded the hardness adjusted water quality objective for lead.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)

Temporal Representation: Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.

Environmental Conditions: Approximately 54 percent of the samples were collected after storm events.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48995, Lead

Region 9

San Juan Creek

LOE ID: 75939

Pollutant: Lead
LOE Subgroup: Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48995, Lead

Region 9

San Juan Creek

LOE ID:	75938
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	48946	Region 9
San Juan Creek		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48946, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
San Juan Creek	

LOE ID: 75943

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48946, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Juan Creek

LOE ID:	77824
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	48964	Region 9
San Juan Creek		

Pollutant: Malathion

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 20 samples exceed the criteria for the protection of aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 20 samples exceed the criteria for the protection of aquatic life and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48964, Malathion	Region 9
San Juan Creek	

LOE ID: 77825

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of 20 samples exceed the CDPH notification level for Malathion criteria of 160.0 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) notification level criteria for malathion in freshwater is 160.0 ug/L.
Guideline Reference:	CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently considered Notification Levels.
Spatial Representation:	Samples were collected at San Juan Creek, sites REF-CS, SJC-74, SJCC-CC and SJNL01.
Temporal Representation:	Samples were collected from September 2006 through April 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48964, Malathion

Region 9

San Juan Creek

LOE ID:	75944
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of 20 samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C.
Spatial Representation:	Samples were collected at San Juan Creek, sites REF-CS, SJC-74, SJCC-CC and SJNL01.
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

DECISION ID	48966	Region 9
San Juan Creek		

Pollutant: Manganese
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of two samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48966, Manganese	Region 9
San Juan Creek	

LOE ID: 75946
Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Manganese.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 0.05 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 48966, Manganese
San Juan Creek**

Region 9

LOE ID: 75945

Pollutant: Manganese

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Manganese.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 0.05 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**DECISION ID 49000
San Juan Creek**

Region 9

Pollutant: Mercury

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceed the criteria for mercury.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the criteria for mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49000, Mercury
San Juan Creek

Region 9

LOE ID: 75947

Pollutant: Mercury
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater](#)

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	49003	Region 9
San Juan Creek		

Pollutant: **Methyl Parathion**

Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49003, Methyl Parathion	Region 9
San Juan Creek	

LOE ID: 77826

Pollutant: Methyl Parathion

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83A-92.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49009	Region 9
San Juan Creek		
Pollutant:	Nickel	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceeded the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 36 samples exceed the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 	

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49009, Nickel
San Juan Creek**

Region 9

LOE ID:	75950
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 49009, Nickel
San Juan Creek**

Region 9

LOE ID:	75951
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49009, Nickel

Region 9

San Juan Creek

LOE ID:	75952
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49009, Nickel
San Juan Creek

Region 9

LOE ID:	75953
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 34 samples exceeded the hardness adjusted water quality objective for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49009, Nickel
San Juan Creek

Region 9

LOE ID:	75949
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49034	Region 9
San Juan Creek		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49034, PCBs (Polychlorinated biphenyls)

Region 9

San Juan Creek

LOE ID:	72812
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 901SJSJC9 (San Juan Creek 9).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

49035

Region 9

San Juan Creek

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity

to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the sediment or water guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the sediment and water guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49035, Permethrin, total
San Juan Creek**

Region 9

LOE ID:	75961
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

**Line of Evidence (LOE) for Decision ID 49035, Permethrin, total
San Juan Creek****Region 9**

LOE ID:	75960
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 49035, Permethrin, total
San Juan Creek****Region 9**

LOE ID:	75962
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49035, Permethrin, total San Juan Creek

Region 9

LOE ID:	75959
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:
QAPP Information Reference(s):

SWAMP data collected before September 2008 followed the QAMP 2002.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	49036	Region 9
San Juan Creek		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49036, Silver	Region 9
San Juan Creek	

LOE ID:	75973
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 34 samples exceeded the hardness adjusted water quality objective for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49036, Silver

Region 9

San Juan Creek

LOE ID:	75972
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49036, Silver

Region 9

San Juan Creek

LOE ID: 75971

Pollutant: Silver
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Silver.
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 48969

Region 9

San Juan Creek

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of two samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48969, Sulfates

Region 9

San Juan Creek

LOE ID:	75974
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48969, Sulfates

Region 9

San Juan Creek

LOE ID:	75975
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48978	Region 9
San Juan Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Temperature, water Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 16 samples exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 16 samples exceeded the objective and this sample size is insufficient to determine, with the

power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48978, Temperature, water
San Juan Creek**

Region 9

LOE ID:	75977
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 14 samples exceeded the evaluation guideline.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected from the SJ1 - San Juan 1 and SJ2 - San Juan 2 stations.
Temporal Representation:	Samples were collected approximately once a month from April 2009 to February 2010.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48978, Temperature, water
San Juan Creek**

Region 9

LOE ID:	75976
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48982	Region 9
San Juan Creek		
Pollutant:	Total Dissolved Solids	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of two samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and	

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48982, Total Dissolved Solids

Region 9

San Juan Creek

LOE ID: 75983

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Dissolved Solids.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48982, Total Dissolved Solids

Region 9

San Juan Creek

LOE ID: 75984

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Dissolved Solids.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 500 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]

Temporal Representation: Data was collected on a single day 4/30/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	48986	Region 9
San Juan Creek		

Pollutant: Turbidity

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48986, Turbidity	Region 9
San Juan Creek	

LOE ID:	75928
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48986, Turbidity
San Juan Creek

Region 9

LOE ID:	75927
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for San Juan Creek within the San Juan Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation: Data was collected on a single day 4/30/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	48989	Region 9
San Juan Creek		

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48989, Zinc	Region 9
San Juan Creek	

LOE ID: 75929

Pollutant: Zinc
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48989, Zinc

Region 9

San Juan Creek

LOE ID:	75934
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 34 samples exceeded the hardness adjusted water quality objective for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48989, Zinc

Region 9

San Juan Creek

LOE ID:	75933
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48989, Zinc

Region 9

San Juan Creek

LOE ID:	75932
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48989, Zinc

Region 9

San Juan Creek

LOE ID:	75931
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48989, Zinc
San Juan Creek

Region 9

LOE ID:	75930
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 33410
San Juan Creek

Region 9

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the

Listing Policy. Under section 3.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. One of 32 samples (fraction not reported) and zero of 15 (dissolved fraction) exceeded the water quality objective for warm fresh. One of eleven samples exceeds the water quality objective for agriculture. Guidelines were not exceeded for the cold freshwater or estuarine beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy..
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 32 samples (fraction not reported) and this does not exceed the allowable frequency of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33410, pH

Region 9

San Juan Creek

LOE ID:	75967
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 sample of pH data had no exceedences.
Data Reference:	Data for bacteria in various waterbodies, Feb. 2005-May 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Juan Creek - estuary station.
Temporal Representation:	One sample was collected on 5/5/2007.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33410, pH

Region 9

San Juan Creek

LOE ID:	75966
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of 30 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the REF-CS, SJC-74, SJC-CC, and SJNL01 stations.
Temporal Representation:	Samples were collected approximately once a month from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33410, pH San Juan Creek

Region 9

LOE ID:	75965
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 15 averages of pH had no exceedances.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SJ1 - San Juan 1 and SJ2 - San Juan 2 stations.
Temporal Representation:	Samples were collected approximately once a month from April 2009 to February 2010.
Environmental Conditions:	

Line of Evidence (LOE) for Decision ID 33410, pH

Region 9

San Juan Creek

LOE ID:	75963
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33410, pH

Region 9

San Juan Creek

LOE ID:	3007
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the USDA Forest Service in 1998. One of 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) and 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Juan Creek (San Juan/Hot Springs Drainage).
Temporal Representation:	Samples were collected 6 times on 06/26/1998 from 9:55am to 11:00am and 5 times on 10/30/1998 from 9:40am to 10:30am.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33410, pH
San Juan Creek**

Region 9

LOE ID:	75964
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 43761
San Juan Creek**

Region 9

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture Contaminated Sediments Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Removal of Riparian Vegetation Source Unknown Unknown Nonpoint Source

Expected TMDL Completion Date:	Unknown Point Source Urban Runoff/Storm Sewers 2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects		Region 9
San Juan Creek		
LOE ID:	75926	
Pollutant:	Toxicity	
LOE Subgroup:	Toxicity	
Matrix:	Sediment	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	1	
Data and Information Type:	TOXICITY TESTING	
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyaella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).	
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the	

control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.

Guideline Reference:

Spatial Representation:

The sample was collected at station 901SUP068.

Temporal Representation:

The sample was collected in January 2007.

Environmental Conditions:

QAPP Information:

Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID: 75923

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 25

Number of Exceedances: 8

Data and Information Type:

TOXICITY TESTING

Data Used to Assess Water Quality:

Twenty-five samples were collected to test for toxicity. Eight of the 25 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass, Ceriodaphnia reproduction and Selenastrum growth.

Data Reference:

[Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.

Guideline Reference:

Spatial Representation:

The sample was collected at stations REF-CS, SJC-74, SJC-CC, and SJNL01 San Juan Creek.

Temporal Representation:

The sample was collected from June 2006 to June 2010.

Environmental Conditions:

QAPP Information:

The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID: 21401

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Eight samples were collected at San Juan Creek station 901SJSJC5 and 901SJSJC9 from October 2002 to May 2003, they showed significant toxicity levels (SL) in the following test: Selenastrum algae growth test - Four of eight samples were toxic.
	Ceriodaphnia dubia survival and reproduction: None of the samples were toxic.
	Hyalella azteca: One of six samples were toxic. Two additional tests were not valid.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Water Toxicity Samples were collected at San Juan Creek stations 901SJSJC5 and 901SJSJC9
Temporal Representation:	Water samples were collected on September 2002, November 2002, January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	9096
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at San Juan station 901SJSJC9 on October 2002, January 2003, April 2003, and May 2003. Two of the four samples showed excessive

Data Reference:	selenium concentrations according to results in California's Surface Water Ambient Monitoring Program. Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation: Temporal Representation:	Water samples were collected at San Juan Creek station (901SJSJC9). Samples for San Juan Creek were collected on October 2002, January 2003, April 2003, and May 2003.
Environmental Conditions: QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects
San Juan Creek

Region 9

LOE ID:	26443
Pollutant: LOE Subgroup: Matrix: Fraction:	Benthic Community Effects Adverse Biological Responses Water None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples: Number of Exceedances:	8 8
Data and Information Type: Data Used to Assess Water Quality:	Benthic macroinvertebrate surveys Eight samples of IBI data were taken from September 1998 to 2007 at one sampling site. Of the total number of samples, all eight of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 901SJC74x on San Juan Creek.

Temporal Representation:	Sampling occurred during eight events over a ten year period from September 1998 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	3009
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of 4 samples exceeded the CTR (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	California Toxic Rule: Human Health-FW (water & organisms) .00059 Åµg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	California Toxic Rule: Human Health-FW (water & organisms) 0.00059 Åµg/L.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station at San Juan Creek: 33.484429 -117.67577.
Temporal Representation:	Four samples collected from October 2002 through May of 2003.
Environmental Conditions:	San Juan Creek Watershed: 901.27.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	3008
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores ranged from 106 to 125, relatively higher compared to other sampled waterbodies. BMI ranking scores were near average (1 below, one above, and one at) compared to other sampled waterbodies. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No objective.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at in San Juan Creek, 5 riffles upstream of Highway 74 (SJC-74). Lat/Long coordinates are N33E31' 9.0"/W117E37' 25.4".
Temporal Representation:	Samples were collected in September and November 1998 and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	75948
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All six samples exceeded the water quality objective for mercury.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.

Environmental Conditions: Approximately 54 percent of the samples were collected after storm events.
QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects
San Juan Creek

Region 9

LOE ID: 75944

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 20
Number of Exceedances: 1

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: One of 20 samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference: [Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C.](#)

Spatial Representation: Samples were collected at San Juan Creek, sites REF-CS, SJC-74, SJCC-CC and SJNL01.
Temporal Representation: Samples were collected from 2006 through 2009.

Environmental Conditions:
QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects
San Juan Creek

Region 9

LOE ID: 75884

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Bifenthrin.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	75969
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	75970
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the 17 samples exceeded the water quality objective for selenium. Two of the reporting limits for non-detect samples were greater than the water quality objective for selenium and were not used in the assessment.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Juan Creek at Cold Spring (REF-CS), at Ortega Highway (SJC-74), at Camino Capistrano (SJC-CC), and at La Novia (SJNL01)
Temporal Representation:	Samples were collected from REF-CS and SJC-CC starting in September of 2006 and continuing twice per year (fall and spring) during 2007, 2008, and 2009. Samples were collected from SJC-74 in September of 2006, in May of 2007 and 2008, and in April of 2009. Samples were collected from SJNL01 starting in April 2007 until February of 2009.
Environmental Conditions:	Approximately 54 percent of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	75968
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Selenium.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	6814
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Ten of twelve flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Program Annual Progress Reports from 2004-2007. Samples were collected during two to four storm events a year from 2002-2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) goal is 0.1 mg/L for phosphorus in streams and other flowing waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station at La Novia Avenue at 33.5020°N, 117.6482°W.
Temporal Representation:	Samples were collected during two to four storm events a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

San Juan Creek

LOE ID:	80743
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six stations on San Juan Creek were sampled twenty times. Eleven of the twenty samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Six samples did not have scores calculated due to low organism counts.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 901SJSJC9, SJC-CC, 901S06030, SJC-74, REF-CS, 901S00313
Temporal Representation:	Surveys done from 2006 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, and for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Quality Assurance Project Plan for the Orange County Stormwater Program.

San Juan Creek

LOE ID:	75883
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	75881
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek @ La Novia - 901SUP068]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43761, Benthic Community Effects

Region 9

San Juan Creek

LOE ID:	75880
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores for this water body were below 40 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following stations: 901S00313-San Juan Creek ~1mi above Lion Cyn. Cr. 901S06030-San Juan Creek above La Novia Ave.
Temporal Representation:	Surveys done April 30, 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
QAPP Information Reference(s):	

San Juan Creek

LOE ID:	75879
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 13 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 901SJSJC9-San Juan Creek 9.
Temporal Representation:	Surveys done May 5, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

DECISION ID

49033

Region 9

San Juan Creek

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Fourteen of the</p>

forty samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of forty samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 49033, Oxygen, Dissolved
San Juan Creek**

Region 9

LOE ID:	75957
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Eight of the 15 samples exceeded the Dissolved Oxygen objective.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 6.0 mg/l in inland surface waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SJ1 - San Juan 1 and SJ2 - San Juan 2 stations.
Temporal Representation:	Samples were collected approximately once a month from April 2009 to February 2010.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 49033, Oxygen, Dissolved
San Juan Creek**

Region 9

LOE ID:	75958
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 21 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 6.0 mg/l in inland surface waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the REF-CS, SJC-74, SJC-CC, and SJNL01 stations.
Temporal Representation:	Samples were collected approximately thrice semi-annually from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49033, Oxygen, Dissolved San Juan Creek

Region 9

LOE ID:	75956
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 6.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49033, Oxygen, Dissolved
San Juan Creek

Region 9

LOE ID:	75955
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 2 monitoring sites [San Juan Creek ~1mi above Lion Cyn. Cr. - 901S00313, San Juan Creek above La Novia Ave. - 901S06030]
Temporal Representation:	Data was collected on a single day 4/30/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 43657

Region 9

San Juan Creek

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Ten of the samples exceed the water quality objective for nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 12 samples exceed the total nitrogen water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43657, Nitrogen**Region 9****San Juan Creek**

LOE ID: 7759

Pollutant: Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 12
Number of Exceedances: 10

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Ten of twelve flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Program Annual Progress Report, 2004-2007. Samples were collected during two to four storm events a year from 2002-2006.

Data Reference: [Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment \(San Diego Region\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
The Water Quality Control Plan for the San Diego Basin (9) states: "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used." Since the goal for total phosphorus is 0.1 mg/L, then according to the ratio provided, the goal for total nitrogen

Objective/Criterion Reference: is 1 mg/L.
[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station at La Novia Avenue at 33.5020°N, 117.6482°W.

Temporal Representation: Samples were collected during two to four storm events a year from 2002-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

DECISION ID	32893	Region 9
San Juan Creek		

Pollutant: Phosphorus

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status: Original

Sources: Source Unknown

Expected TMDL Completion Date: 2021

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Ten of the samples exceed the water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 23 samples exceeded the total phosphorus water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32893, Phosphorus	Region 9
San Juan Creek	

LOE ID: 6814

Pollutant: Phosphorus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Ten of twelve flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Program Annual Progress Reports from 2004-2007. Samples were collected during two to four storm events a year from 2002-2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) goal is 0.1 mg/L for phosphorus in streams and other flowing waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station at La Novia Avenue at 33.5020°N, 117.6482°W.
Temporal Representation:	Samples were collected during two to four storm events a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32893, Phosphorus **San Juan Creek**

Region 9

LOE ID:	3006
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the USDA Forest Service in 1998. Eleven samples were collected. All were at or below the standard of 0.1 mg/L. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, streams, and other flowing waters and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to

Objective/Criterion Reference:	be exceeded more than 10% of the time. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in San Juan Creek (Hot Springs/San Juan Drainage).
Temporal Representation:	Samples were collected 6 times on 06/26/1998 from 9:55am-11:00am and 5 times on 10/30/1998 from 9:40am to 10:30am.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Prima Deshecha Creek](#)
Water Body ID: CAR9013000020010924090843
Water Body Type: River & Stream

DECISION ID	43494	Region 9
Prima Deshecha Creek		

Pollutant: Nickel
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. 3 of the 35 samples exceed the water quality objective for cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 35 samples exceed the cadmium water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43494, Nickel	Region 9
Prima Deshecha Creek	

LOE ID: 7740

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality:	Three out of eight samples collected exceed the hardness adjusted Criterion Continuous Concentration for dissolved nickel according to results in the Orange County Stormwater Annual Progress Reports from 2002 through 2006. Samples were collected from December 2002 through March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved nickel Criterion Continuous Concentration is 52 ppb and the Criterion Maximum Concentration is 470 ppb, but these criteria vary depending upon hardness of the sample (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station in Prima Deschecha Creek at 33.44679°N, 117.64448°W.
Temporal Representation:	Samples were collected from December 2002 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43494, Nickel

Region 9

Prima Deshecha Creek

LOE ID:	75495
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 27 samples exceeded the hardness adjusted water quality criterion for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2006 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43494, Nickel
Prima Deshecha Creek

Region 9

LOE ID:	75512
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to test for toxicity. Three of the six samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Purple Urchin fertilization and Mysid survival and biomass.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station PDCM01 Prima Deshecha Channel.
Temporal Representation:	The sample was collected from November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

DECISION ID 36180
Prima Deshecha Creek

Region 9

Pollutant:	Cadmium
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence is available in the administrative record to assess this pollutant. 29 of the 35 samples exceed the water quality objective for cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 29 of 35 samples exceed the cadmium water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36180, Cadmium

Region 9

Prima Deshecha Creek

LOE ID:	75482
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of the 9 samples exceeded the hardness adjusted water quality criterion for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2007 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36180, Cadmium

Region 9

Prima Deshecha Creek

LOE ID:	7739
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three out of eight samples collected exceed the hardness adjusted Criterion Maximum Concentration for dissolved cadmium. All eight of the samples collected exceed hardness adjusted Criterion Continuous Concentration for dissolved cadmium according to results in the Orange County Stormwater Progress Reports from 2002-2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved cadmium Criterion Continuous Concentration is 2.2 ppb and the Criterion Maximum Concentration is 4.3 ppb, but these criteria may vary depending upon hardness of the sample (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station in Prima Deshecha Creek at 33.44679°N, 117.64448°W.
Temporal Representation:	Samples were collected from December 2002 through March 2006.
Environmental Conditions:	Samples were collected during Wet Weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36180, Cadmium

Region 9

Prima Deshecha Creek

LOE ID:	75512
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Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to test for toxicity. Three of the six samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Purple Urchin fertilization and Mysid survival and biomass.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station PDCM01 Prima Deshecha Channel.
Temporal Representation:	The sample was collected from November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

DECISION ID	48500	Region 9
Prima Deshecha Creek		

Pollutant:	Ammonia
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the seven samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of seven samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48500, Ammonia

Region 9

Prima Deshecha Creek

LOE ID:	75496
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of seven averaged samples exceeded the water quality objective for unionized ammonia. Samples were reported as as total ammonia as nitrogen and were converted to unionized ammonia as nitrogen before being compared with the objective. One averaged sample for 11/27/06 measured at 2.88 mg/L as total ammonia as nitrogen was not counted because it did not have corresponding pH and temperature data. The single exceedance was calculated at 1.18 mg/L as N for total ammonia at pH 8 and 14.66 degrees C which converts to 0.031 mg/L as N of unionized ammonia.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Calle Grande Vista.
Temporal Representation:	Samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

48501

Region 9

Prima Deshecha Creek

Pollutant:

Arsenic

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 27 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48501, Arsenic

Region 9

Prima Deshecha Creek

LOE ID: 75501

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 27
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the 27 samples exceeded the water quality criteria for arsenic.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2007 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48504	Region 9
Prima Deshecha Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
 Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 21 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
 Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.</p>

Line of Evidence (LOE) for Decision ID 48504, Chlorpyrifos	Region 9
Prima Deshecha Creek	

LOE ID:	75484
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Twenty one samples did not exceed the continuous concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L, However for four samples the reporting limit was greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Twenty five samples were collected at Prima Deshecha Creek, site PDCM01
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	48502	Region 9
Prima Deshecha Creek		
Pollutant:	Chromium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 27 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.	

Line of Evidence (LOE) for Decision ID 48502, Chromium**Region 9****Prima Deshecha Creek**

LOE ID:	75485
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 27 samples exceeded the hardness adjusted water quality criterion for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2007 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID**48503****Region 9****Prima Deshecha Creek**

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 27 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.</p>

Line of Evidence (LOE) for Decision ID 48503, Copper		Region 9
Prima Deshecha Creek		
LOE ID:	75486	
Pollutant:	Copper	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	27	
Number of Exceedances:	0	
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)	
Data Used to Assess Water Quality:	None of the 27 samples exceeded the hardness adjusted water quality criterion for copper.	
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.	
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition	
Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.	
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from	

Environmental Conditions: PDCM01 intermittently from November 2007 through February 2009.
 QAPP Information: The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events. Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
 QAPP Information Reference(s):

DECISION ID	48505	Region 9
Prima Deshecha Creek		

Pollutant: Diazinon
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 25 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48505, Diazinon	Region 9
Prima Deshecha Creek	

LOE ID: 75487

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: None of twenty five samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Twenty five samples were collected at Prima Deshecha Creek, site PDCM01
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	48506	Region 9
Prima Deshecha Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 27 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48506, Lead	Region 9
Prima Deshecha Creek	

LOE ID: 75492

Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 27 samples exceeded the hardness adjusted water quality criterion for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2007 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48508	Region 9
Prima Deshecha Creek		
Pollutant:	Mercury	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1, one line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the criteria for mercury.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>	

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the criteria for mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48508, Mercury

Region 9

Prima Deshecha Creek

LOE ID:	75494
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of one samples exceeded the water quality criteria for mercury.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criterion Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Prima Deshecha Channel at PDCM01.
Temporal Representation:	Samples were collected from PDCM01 on November 4, 2008
Environmental Conditions:	The sample was collected in wet weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 48512

Region 9

Prima Deshecha Creek

Pollutant: Oxygen, Dissolved

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48512, Oxygen, Dissolved
Prima Deshecha Creek

Region 9

LOE ID: 75497

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Zero of 8 samples exceeded the objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the PD-CGV and PDCM01 stations.
Temporal Representation: Samples were collected approximately four times per semi-annual period from April 2007 to

February 2009.

Environmental Conditions:

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	48513	Region 9
Prima Deshecha Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48513, Selenium	Region 9
Prima Deshecha Creek	

LOE ID: 75499

Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality: The reporting limits for all of the 27 non-detect samples exceeded the water quality criterion for selenium.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2007 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48509	Region 9
Prima Deshecha Creek		
Pollutant:	Silver	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 27 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.	
Line of Evidence (LOE) for Decision ID 48509, Silver		Region 9

Prima Deshecha Creek

LOE ID:	75500
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 27 samples exceeded the hardness adjusted water quality criterion for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2007 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48510	Region 9
Prima Deshecha Creek		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the criterion.	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 27 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48510, Zinc

Region 9

Prima Deshecha Creek

LOE ID:	75513
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 27 samples exceeded the hardness adjusted water quality criterion for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Prima Deshecha Channel at Calle Grande Vista from stations PD-CGV and PDCM01.
Temporal Representation:	The sample was collected from PD-CGV on 4/17/2007. Samples were collected from PDCM01 intermittently from November 2007 through February 2009.
Environmental Conditions:	The sample collected from PD-CGV is representative of dry weather conditions. The remaining 96% of the samples collected from PDCM01 were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

DECISION ID	48511	Region 9
Prima Deshecha Creek		

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. One of the 20 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 20 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48511, pH	Region 9
Prima Deshecha Creek	

LOE ID: 75498
Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 20
Number of Exceedances: 1
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Numeric data generated from 20 minimums and maximums of pH data had 1 exceedence.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the PD-CGV and PDCM01 stations.
Temporal Representation: Samples were collected approximately once a month from April 2007 to November 2009.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

DECISION ID	48514	Region 9
Prima Deshecha Creek		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. 14 of the 14 samples exceed the objective for enterococcus. 12 of 14 samples exceed the objective for fecal coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 14 of 14 and 12 of 14 samples exceed the objectives for indicator bacteria and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48514, Indicator Bacteria	Region 9
Prima Deshecha Creek	

LOE ID: 75491

Pollutant: Fecal Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geometric mean exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean fecal coliform concentration shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site PDCM01, Prima Deshecha Channel at Calle Grande Vista.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48514, Indicator Bacteria

Region 9

Prima Deshecha Creek

LOE ID:	75490
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the fourteen samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site PDCM01, Prima Deshecha Channel at Calle Grande Vista.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48514, Indicator Bacteria

Region 9

Prima Deshecha Creek

LOE ID:	75489
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The one geomean exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean enterococcus concentration shall not exceed more than 33/100ml. Ambient Water Quality Criteria USEPA. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site PDCM01, Prima Deshecha Channel at Calle Grande Vista.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48514, Indicator Bacteria**Region 9****Prima Deshecha Creek**

LOE ID:	75488
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	14
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fourteen of the fourteen samples exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 61/100ml. Ambient Water Quality Criteria USEPA. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from site PDCM01, Prima Deshecha Channel at Calle Grande Vista.
Temporal Representation:	The samples were collected from April 2007 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	48507	Region 9
Prima Deshecha Creek		

Pollutant:	Malathion
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 25 samples exceed the evaluation guideline for malathion. Three of six samples exhibited toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 25 samples exceeded the evaluation guideline for malathion, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48507, Malathion	Region 9
Prima Deshecha Creek	

LOE ID:	75493
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	6

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Six of twenty five samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Twenty five samples were collected at Prima Deshecha Creek, site PDCM01
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48507, Malathion

Region 9

Prima Deshecha Creek

LOE ID:	75512
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to test for toxicity. Three of the six samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Purple Urchin fertilization and Mysid survival and biomass.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station PDCM01 Prima Deshecha Channel.
Temporal Representation:	The sample was collected from November 2006 to February 2009.

Environmental Conditions:

QAPP Information:

The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

DECISION ID	43927	Region 9
Prima Deshecha Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Eight of nine samples (collected in both dry and wet conditions) exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of nine samples (collected in both dry and wet conditions) exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 43927, Nitrogen	Region 9
Prima Deshecha Creek	

LOE ID:	7743
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality:	Four of five flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Annual Progress Report from 2002 through 2006. Samples were collected from December 2002 through March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) states: "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used." Since the goal for total phosphorus is 0.1 mg/L, then according to the ratio provided, the goal for total nitrogen is 1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Prima Deschecha Creek at 33.44679°N, 117.64448°W.
Temporal Representation:	Samples were collected from December 2002 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	33809	Region 9
Prima Deshecha Creek		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Fifty of samples exceeded the water quality objective for total phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fifty of 59 samples exceeded the total phosphorus water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33809, Phosphorus

Region 9

Prima Deshecha Creek

LOE ID:	7742
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of five flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Annual Progress Reports from 2002 through 2006. Samples were collected from December 2002 through March 2006.
Data Reference:	Orange County Stormwater Program, 2004-2007, Unified Annual Progress Reports, Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. The Water Quality Control Plan for the San Diego Basin (9) goal is 0.1 mg/L for phosphorus in streams and other flowing waters (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule, 40 CFR Part 131, U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Samples were collected at the mass loading station in Prima Deshecha Creek at 33.44679°N, 117.64448°W.
Temporal Representation:	Samples were collected from December 2002 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33809, Phosphorus

Region 9

Prima Deshecha Creek

LOE ID:	3011
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	46
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by Orange County in 1997-2000. Forty-six of 54 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - streams and other flowing waters and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Prima Deshecha Creek. Exact location was not reported.
Temporal Representation:	Samples were collected 1-5 times per month from 07/02/1997 to 06/29/2000. At least 4 months per year were represented.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44624	Region 9
Prima Deshecha Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess delisting status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Forty of 54 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty of 54 samples were in exceedance of the turbidity water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44624, Turbidity
Prima Deshecha Creek**

Region 9

LOE ID:	3010
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by Orange County from 1997-2000. Forty of 54 samples were in exceedance. Turbidity concentrations ranged from 4.0 to 5400. There was no note of weather events to correspond with changing turbidity levels.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 NTU. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Prima Deshecha Channel.
Temporal Representation:	Samples were collected 1-5 times per month from 07/02/1997 to 06/29/2000. Data was reported for at least four months of each year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Segunda Deshecha Creek](#)
Water Body ID: CAR9013000020010924101553
Water Body Type: River & Stream

DECISION ID	44886	Region 9
Segunda Deshecha Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. 15 of the 21 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 15 of the 21 samples exceed the criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44886, Toxicity	Region 9
Segunda Deshecha Creek	

LOE ID:	76738
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S00997.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44886, Toxicity
Segunda Deshecha Creek

Region 9

LOE ID:	7768
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum Algae Growth- None of the three samples exhibited NOEC's less than 100%. Ceriodaphnia dubia survival and reproduction, All four samples exhibited a NOEC's less than 100%. <i>Hyalella azteca</i> survival- None of the four samples exhibited LC50's less than 100% according to results in the Orange County Storm Water Program Annual Progress Reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be sustain free from toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce harmful physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected in Segunda Deshecha Creek upstream of Avenida Presidio.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control conducted according to the County of Oranges quality assurance plan.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44886, Toxicity

Region 9

Segunda Deshecha Creek

LOE ID:	76737
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Sixteen samples were collected to test for toxicity. Eleven of the 16 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival, Hyallela biomass, Mysid survival and biomass and purple urchin development and fertilization.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at stations SD-AP and SDCM02 Segunda Deshecha Channel.
Temporal Representation:	The sample was collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

34534

Region 9

Segunda Deshecha Creek

Pollutant: Turbidity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one samples exceed the objective. LOE 4733 is a placeholder to support a 303(d) listing decision made prior to 2006.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The basis for this listing decision was made prior to 2006. The regional water board staff will update that information in a subsequent listing cycle.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34534, Turbidity

Region 9

Segunda Deshecha Creek

LOE ID: 76739

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The

Objective/Criterion Reference: Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 20 NTU.
[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]

Temporal Representation: Data was collected on a single day 5/14/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 34534, Turbidity

Region 9

Segunda Deshecha Creek

LOE ID: 4733

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID 49503

Region 9

Segunda Deshecha Creek

Pollutant: Alkalinity as CaCO3
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. zero of one samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49503, Alkalinity as CaCO₃
Segunda Deshecha Creek**

Region 9

LOE ID:	76779
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

DECISION ID	49426	Region 9
Segunda Deshecha Creek		

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

 One line of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49426, Aluminum	Region 9
Segunda Deshecha Creek	

LOE ID: 76671

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52002	Region 9
Segunda Deshecha Creek		

Pollutant:	Ammonia
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the criterion and zero of 13 samples exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the criterion and zero of 13 samples exceeded the objective. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52002, Ammonia	Region 9
Segunda Deshecha Creek	

LOE ID:	76723
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Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 13 averaged samples exceeded the water quality objective for unionized ammonia. Samples were reported as as total ammonia as nitrogen and were converted to unionized ammonia as nitrogen before being compared with the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Camino Real and Avenida Pico.
Temporal Representation:	Samples were collected from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52002, Ammonia
Segunda Deshecha Creek

Region 9

LOE ID:	76672
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49427	Region 9
Segunda Deshecha Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceeded the guideline or criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the guideline or criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 49427, Arsenic	Region 9
Segunda Deshecha Creek	

LOE ID:	76675
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 35 samples exceeded the water quality objective for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 and SD-AP.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49427, Arsenic

Region 9

Segunda Deshecha Creek

LOE ID:	76674
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring

Temporal Representation:	site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Environmental Conditions:	Data was collected on a single day 5/14/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed. Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49427, Arsenic

Region 9

Segunda Deshecha Creek

LOE ID:	76673
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49360

Region 9

Segunda Deshecha Creek

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49360, Bifenthrin

Region 9

Segunda Deshecha Creek

LOE ID:	76683
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of one and one of 15 samples, respectively, exceed the respective water quality criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one and one of 15 samples, respectively, exceed the water quality criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49444, Cadmium	Region 9
Segunda Deshecha Creek	

LOE ID:	76685
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved

Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]

Temporal Representation:

Data was collected on a single day 5/14/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49444, Cadmium

Region 9

Segunda Deshecha Creek

LOE ID: 76686

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 14
Number of Exceedances: 1

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: One of the 14 samples exceeded the hardness adjusted water quality objective for cadmium. Samples collected within seven days were averaged. Pursuant to CTR recommendations, a hardness cap of 400 mg/L was used in conditions as appropriate. One sample at SD-AP exceeded the hardness adjusted CCC of 6.16 ug/L for dissolved Cd.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from Segunda Deshecha Channel at sites SDCM02 (eight samples) and SD-AP (six samples).

Temporal Representation: Samples were collected from September 2006 through May of 2009.

Environmental Conditions: Approximately 70% of the samples were collected after storm events.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 49444, Cadmium**Region 9****Segunda Deshecha Creek**

LOE ID:	76684
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID**49507****Region 9****Segunda Deshecha Creek**

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of one samples exceed the objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49507, Chloride

Region 9

Segunda Deshecha Creek

LOE ID:	76693
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

49447

Region 9

Segunda Deshecha Creek

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceeded the guideline or criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the guideline or criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49447, Chromium		Region 9
Segunda Deshecha Creek		
LOE ID:	76694	
Pollutant:	Chromium	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.	
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al.	

Guideline Reference:	2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49447, Chromium
Segunda Deshecha Creek

Region 9

LOE ID:	76695
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49447, Chromium
Segunda Deshecha Creek

Region 9

LOE ID:	76696
Pollutant:	Chromium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 35 samples exceeded the hardness adjusted water quality objective for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 and SD-AP.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49449	Region 9
Segunda Deshecha Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. For water samples, zero of 14 samples exceed the water quality criteria for the protection of aquatic life.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. For water samples, zero of 14 samples exceed the water quality criteria for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49449, Copper

Region 9

Segunda Deshecha Creek

LOE ID:	76701
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49449, Copper

Region 9

Segunda Deshecha Creek

LOE ID:	76697
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49449, Copper

Region 9

Segunda Deshecha Creek

LOE ID:	76702
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of 14 samples exceeded the hardness adjusted water quality objective for copper. Samples collected within 7 days were averaged. Pursuant to CTR recommendations, a hardness cap of 400 mg/L was used in conditions as appropriate.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness

dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation:

Samples were collected from Segunda Deshecha Channel at sites SDCM02 (8 samples) and SD-AP (6 samples) .

Temporal Representation:

Samples were collected from September 2006 through May of 2009.

Environmental Conditions:

Approximately 70% of the samples were collected after storm events.

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	49364	Region 9
Segunda Deshecha Creek		

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49364, Cyhalothrin, Lambda	Region 9
Segunda Deshecha Creek	

LOE ID: 76704
Pollutant: Cyhalothrin, Lambda
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49366	Region 9
Segunda Deshecha Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49366, Cypermethrin

Region 9

Segunda Deshecha Creek

LOE ID: 76705

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]

Temporal Representation: Data was collected on a single day 5/14/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 49367

Region 9

Segunda Deshecha Creek

Pollutant: Deltamethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49367, Deltamethrin

Region 9

Segunda Deshecha Creek

LOE ID:	76706
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 34 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49563, Diazinon	Region 9
Segunda Deshecha Creek	

LOE ID:	72835
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of 34 samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Twenty eight samples were collected at Segunda Deshecha Creek, Sites: SD-AP and SDCM02.

Temporal Representation: Samples were collected from 2006 through 2009.

Environmental Conditions: According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.

QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s): [Quality Assurance Project Plan for the Orange County Stormwater Program.](#)

DECISION ID	49368	Region 9
Segunda Deshecha Creek		

Pollutant: Esfenvalerate/Fenvalerate

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49368, Esfenvalerate/Fenvalerate	Region 9
Segunda Deshecha Creek	

LOE ID: 76709

Pollutant: Esfenvalerate/Fenvalerate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49369	Region 9
Segunda Deshecha Creek		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49369, Fenpropathrin

Region 9

Segunda Deshecha Creek

LOE ID:	76712
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

49462

Region 9

Segunda Deshecha Creek

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the criteria.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49462, Iron
Segunda Deshecha Creek**

Region 9

LOE ID:	76713
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 49451
Segunda Deshecha Creek**

Region 9

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceeded the guideline or criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the or criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49451, Lead	Region 9
Segunda Deshecha Creek	

LOE ID:	76716
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 35 samples exceeded the hardness adjusted water quality objective for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness

dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation:

Samples were collected from Segunda Deshecha Channel at sites SDCM02 and SD-AP.

Temporal Representation:

Samples were collected from September 2006 through May of 2009.

Environmental Conditions:

Approximately 70% of the samples were collected after storm events.

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49451, Lead

Region 9

Segunda Deshecha Creek

LOE ID: 76715

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]

Temporal Representation: Data was collected on a single day 5/14/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49451, Lead

Region 9

Segunda Deshecha Creek

LOE ID: 76714

Pollutant: Lead
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49465	Region 9
Segunda Deshecha Creek		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49465, Manganese
Segunda Deshecha Creek**

Region 9

LOE ID:	76718
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 49468
Segunda Deshecha Creek**

Region 9

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Eighteen of the 19 samples exceed the criteria for mercury. In addition, 11 of 16 samples exhibit toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of 19 samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 49468, Mercury
Segunda Deshecha Creek**

Region 9

LOE ID:	76719
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the one sample exceeded the water quality objective for mercury.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Station SDCM02.
Temporal Representation:	Samples were collected from on 11/04/2008
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 49454
Segunda Deshecha Creek

Region 9

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Of the water samples collected at the segment, zero of the 14 samples exceed the hardness adjusted CCC.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Of the water samples collected at the segment, zero of the 14 samples exceed the hardness adjusted CCC and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49454, Nickel	Region 9
Segunda Deshecha Creek	

LOE ID:	76720
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for

Guideline Reference:	sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49454, Nickel

Region 9

Segunda Deshecha Creek

LOE ID:	76722
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the 14 samples exceeded the hardness adjusted water quality objective for nickel. Samples collected within seven days were averaged and compared with Hardness adjusted CCC.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 (8 samples) and SD-AP (six samples).
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49454, Nickel

Region 9

Segunda Deshecha Creek

LOE ID:	76721
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Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49512	Region 9
Segunda Deshecha Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. zero of 14 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 14 samples exceeded the objective and this sample size is insufficient to determine, with the

power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49512, Oxygen, Dissolved
Segunda Deshecha Creek**

Region 9

LOE ID:	76724
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 49512, Oxygen, Dissolved
Segunda Deshecha Creek**

Region 9

LOE ID:	76725
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 13 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SD-AP and SDCM02 stations.
Temporal Representation:	Samples were collected approximately thrice semi-annually from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	49370	Region 9
Segunda Deshecha Creek		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Segunda Deshecha Creek

LOE ID:	76726
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49518

Region 9

Segunda Deshecha Creek

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49518, Sulfates

Region 9

Segunda Deshecha Creek

LOE ID:	76733
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49525

Region 9

Segunda Deshecha Creek

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49525, Total Dissolved Solids
Segunda Deshecha Creek**

Region 9

LOE ID: 76736

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 500 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49456	Region 9
Segunda Deshecha Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceeded the guideline or criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 49456, Zinc		Region 9
Segunda Deshecha Creek		

LOE ID:	76746
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49456, Zinc

Region 9

Segunda Deshecha Creek

LOE ID:	76745
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49456, Zinc

Region 9

Segunda Deshecha Creek

LOE ID:	76747
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 35 samples exceeded the hardness adjusted water quality objective for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 and SD-AP.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49515	Region 9
Segunda Deshecha Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero samples exceed the objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section
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303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 27 samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49515, pH

Region 9

Segunda Deshecha Creek

LOE ID:	76728
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 27 minimums and maximums of pH data had no exceedences.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SD-AP and SDCM02 stations.
Temporal Representation:	Samples were collected approximately once a day for a week every semi-annual period from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49515, pH

Region 9

Segunda Deshecha Creek

LOE ID:	76727
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51745	Region 9
Segunda Deshecha Creek		
Pollutant:	Benthic Community Effects	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2025	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	7768
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum Algae Growth-</p> <p>None of the three samples exhibited NOEC's less than 100%.</p> <p>Ceriodaphnia dubia survival and reproduction, All four samples exhibited a NOEC's less than 100%.</p> <p>Hyalella azteca survival-</p> <p>None of the four samples exhibited LC50's less than 100% according to results in the Orange County Storm Water Program Annual Progress Reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.</p>
Data Reference:	Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports, Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be sustain free from toxic substances in concentrations that are toxic to, or that produce harmful physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected in Segunda Deshecha Creek upstream of Avenida Presidio.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control conducted according to the County of Oranges quality assurance plan.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	76693
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	80746
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight samples were taken at two stations in Segunda Deshecha Creek. Seven samples had CSCI scores below the 0.79 threshold, and therefore exceed the water quality objective for the aquatic life beneficial use. One sample did not have a score calculated due to low organism counts.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in

a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference: [The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation: Samples were collected at the following stations: 901S00997 and SD-AP
Temporal Representation: Surveys done from 2006 to 2009.

Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project and the the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.

QAPP Information Reference(s): [RWB9 Stormwater Monitoring Council CY 2009](#)
[Quality Assurance Project Plan for the Orange County Stormwater Program.](#)

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID: 76737

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 16
Number of Exceedances: 11

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Sixteen samples were collected to test for toxicity. Eleven of the 16 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival, Hyallela biomass, Mysid survival and biomass and purple urchin development and fertilization.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation: The sample was collected at stations SD-AP and SDCM02 Segunda Deshecha Channel.
Temporal Representation: The sample was collected from June 2006 to November 2009.

Environmental Conditions:
QAPP Information: The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects**Region 9****Segunda Deshecha Creek**

LOE ID:	76736
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects**Region 9****Segunda Deshecha Creek**

LOE ID:	76733
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Segunda Deshecha Creek within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan
Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects	
Segunda Deshecha Creek	
LOE ID:	76730
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	10
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Ten of the seventeen samples exceeded the water quality objective for selenium. Eighteen non-detect samples had reporting limits greater than the criteria and were not used in this assessment.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 and SD-AP.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Segunda Deshecha Creek

LOE ID:	76729
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	76686
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the 14 samples exceeded the hardness adjusted water quality objective for cadmium. Samples collected within seven days were averaged. Pursuant to CTR recommendations, a hardness cap of 400 mg/L was used in conditions as appropriate. One sample at SD-AP exceeded the hardness adjusted CCC of 6.16 ug/L for dissolved Cd.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 (eight samples) and SD-AP (six samples).
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	76684
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects**Region 9****Segunda Deshecha Creek**

LOE ID:	76682
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was below 40 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 901S00997-Segunda Deshecha Canada above E Avenida Pico
Temporal Representation:	Surveys done May 14, 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects**Region 9****Segunda Deshecha Creek**

LOE ID:	76720
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for

Data Reference:	Nickel. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	76719
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the one sample exceeded the water quality objective for mercury.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Station SDCM02.
Temporal Representation:	Samples were collected from on 11/04/2008
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	76717
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of 13 samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L. Data collected within seven days were averaged.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Thirty-three samples were collected at Segunda Deshecha Creek, sites: SD-AP and SDCM02
Temporal Representation:	Samples were collected from 2006 through 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	72796
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six out of the six samples collected had an IBI score below 40. The scores were, fall 2006: 14.3, spring 2007: 14.3, fall 2007: 17.2, spring 2008: 17.2, fall 2008: 14.3, spring 2009: 14.3.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	Samples were collected at station SD-AP, Segunda Deshecha Channel near Avenida Pico.
Temporal Representation:	The samples were collected in the fall 2006, and the spring and fall of 2007 and 2008 and in the spring of 2009.
Environmental Conditions:	
QAPP Information:	The taxonomic analysis followed the guidelines of the Southern California Freshwater and Marine Invertebrate Taxonomic Associations (SAFIT, SCAMIT). All stream bioassessment sample collection and taxonomic analysis follow the Southern California Regional
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	76722
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the 14 samples exceeded the hardness adjusted water quality objective for nickel. Samples collected within seven days were averaged and compared with Hardness adjusted CCC.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 (8 samples) and SD-AP (six samples).
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	7763
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of four flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Annual Progress Reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) states: "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used." Since the goal for total phosphorus is 0.1 mg/L, then according to the ratio provided, the goal for total nitrogen is 1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Segunda Deschecha Creek at 33.43338°N, 117.63154°W.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	7762
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of four flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Annual Progress reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.
Data Reference:	Orange County Stormwater Program, 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) has a goal of 0.1 mg/L for phosphorus in streams and other flowing waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Segunda Deshecha Creek at 33.43338°N, 117.63154°W.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51745, Benthic Community Effects

Region 9

Segunda Deshecha Creek

LOE ID:	76702
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of 14 samples exceeded the hardness adjusted water quality objective for copper. Samples collected within 7 days were averaged. Pursuant to CTR recommendations, a hardness cap of 400 mg/L was used in conditions as appropriate.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 (8 samples) and SD-AP (6 samples) .
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	51713	Region 9
Segunda Deshecha Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant.

Enterococcus

74 of 163 samples exceed the single sample objective for water contact recreation.

103 of 136 samples exceed the geometric mean objective for water contact recreation.

Fecal coliform

25 of 163 samples exceed the single sample objective for water contact recreation.

19 of 136 samples exceed the geometric mean objective for water contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Samples and exceedences are as follows:

Enterococcus

74 of 163 samples exceed the single sample objective for water contact recreation.
 103 of 136 samples exceed the geometric mean objective for water contact recreation.
 Fecal coliform
 25 of 163 samples exceed the single sample objective for water contact recreation.
 19 of 136 samples exceed the geometric mean objective for water contact recreation.

The enterococcus geomean and single samples exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The fecal and total coliform samples do not exceed the allowable frequency in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria
 Segunda Deshecha Creek**

Region 9

LOE ID:	76711
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirteen of the sixteen samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site SDCM02, Segunda Deshecha Channel at El Camino Real.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria
 Segunda Deshecha Creek**

Region 9

LOE ID:	72804
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	17
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seventeen of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Segunda Deshecha Channel outlet (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria
Segunda Deshecha Creek

Region 9

LOE ID:	72805
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	101
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred one of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Segunda Deshecha Channel outlet (surfzone upcoast and

surfzone downcoast).
 Temporal Representation: The samples were collected once a week from July 2006 to 2009.
 Environmental Conditions:
 QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
 QAPP Information Reference(s): [Quality Assurance Project Plan for the Orange County Stormwater Program.](#)

Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria	Region 9
Segunda Deshecha Creek	

LOE ID: 76710

Pollutant: Fecal Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
 Number of Exceedances: 2

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Two of the two geometric means exceeded the fecal coliform objective.
 Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: The fecal coliform concentration shall not exceed more than 200/100ml. Region 9 Basin Plan.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: The samples were collected from site SDCM02, Segunda Deshecha Channel at El Camino Real.
 Temporal Representation: The samples were collected from November 2006 to February 2009.
 Environmental Conditions:
 QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria	Region 9
Segunda Deshecha Creek	

LOE ID: 76708

Pollutant: Enterococcus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16
 Number of Exceedances: 16

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Sixteen of the sixteen samples exceeded the enterococcus objective.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 61/100ml. Region 9 Basin Plan. Ambient Water Quality Criteria USEPA.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site SDCM02, Segunda Deshecha Channel at El Camino Real.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria
Segunda Deshecha Creek

Region 9

LOE ID:	76707
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two geometric means exceeded the enterococcus objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: The enterococcus concentration shall not exceed more than 33/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected from site SDCM02, Segunda Deshecha Channel at El Camino Real.
Temporal Representation:	The samples were collected from November 2006 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Mass Emissions Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria
Segunda Deshecha Creek

Region 9

LOE ID:	72819
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	58
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-eight of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Segunda Deshecha Channel outlet at Avenida Estacion (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 51713, Indicator Bacteria
Segunda Deshecha Creek

Region 9

LOE ID:	72818
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected from Segunda Deshecha Channel outlet at Avenida Estacion (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s): [Quality Assurance Project Plan for the Orange County Stormwater Program.](#)

DECISION ID	49566	Region 9
Segunda Deshecha Creek		

Pollutant: Malathion

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2027

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 7 samples exceed the criteria for malathion. In addition, 11 of 16 samples exhibited toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 7 samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49566, Malathion	Region 9
Segunda Deshecha Creek	

LOE ID: 76738

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S00997.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49566, Malathion
Segunda Deshecha Creek

Region 9

LOE ID:	7768
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum Algae Growth- None of the three samples exhibited NOEC's less than 100%. Ceriodaphnia dubia survival and reproduction, All four samples exhibited a NOEC's less than 100%. <i>Hyalella azteca</i> survival- None of the four samples exhibited LC50's less than 100% according to results in the Orange County Storm Water Program Annual Progress Reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be sustain free from toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce harmful physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected in Segunda Deshecha Creek upstream of Avenida Presidio.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control conducted according to the County of Oranges quality assurance plan.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 49566, Malathion

Region 9

Segunda Deshecha Creek

LOE ID:	76737
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Sixteen samples were collected to test for toxicity. Eleven of the 16 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival, Hyallela biomass, Mysid survival and biomass and purple urchin development and fertilization.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at stations SD-AP and SDCM02 Segunda Deshecha Channel.
Temporal Representation:	The sample was collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49566, Malathion

Region 9

Segunda Deshecha Creek

LOE ID: 76717

Pollutant: Malathion
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 13
 Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
 Data Used to Assess Water Quality: Three of 13 samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L. Data collected within seven days were averaged.
 Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
 Guideline Reference: [Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C](#)

Spatial Representation: Thirty-three samples were collected at Segunda Deshecha Creek, sites: SD-AP and SDCM02

Temporal Representation: Samples were collected from 2006 through 2009.

Environmental Conditions: According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.

QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

DECISION ID	43140	Region 9
Segunda Deshecha Creek		

Pollutant: Nitrogen

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2027

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Nine over 12 samples (collected in both dry and storm conditions) exceed the water quality objective for biostimulatory substances.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 12 samples exceed the water quality objective for biostimulatory substances and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43140, Nitrogen

Region 9

Segunda Deshecha Creek

LOE ID:	7763
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of four flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Annual Progress Reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).</p> <p>The Water Quality Control Plan for the San Diego Basin (9) states: "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used." Since the goal for total phosphorus is 0.1 mg/L, then according to the ratio provided, the goal for total nitrogen is 1 mg/L.</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Segunda Deschecha Creek at 33.43338°N, 117.63154°W.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March

Environmental Conditions: 2006.
 QAPP Information: Samples were collected during wet weather.
 QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
 QAPP Information Reference(s):

DECISION ID	49459	Region 9
Segunda Deshecha Creek		

Pollutant: Selenium
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eleven of the 18 samples exceed the criteria for selenium. In addition, 11 of 17 samples exhibited toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 18 samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49459, Selenium	Region 9
Segunda Deshecha Creek	

LOE ID: 76730

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 17
Number of Exceedances: 10

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Ten of the seventeen samples exceeded the water quality objective for selenium. Eighteen

	non-detect samples had reporting limits greater than the criteria and were not used in this assessment.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 and SD-AP.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.
Environmental Conditions:	Approximately 70% of the samples were collected after storm events.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49459, Selenium

Region 9

Segunda Deshecha Creek

LOE ID:	76738
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S00997.

Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49459, Selenium
Segunda Deshecha Creek

Region 9

LOE ID:	7768
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum Algae Growth- None of the three samples exhibited NOEC's less than 100%. Ceriodaphnia dubia survival and reproduction, All four samples exhibited a NOEC's less than 100%. Hyalella azteca survival- None of the four samples exhibited LC50's less than 100% according to results in the Orange County Storm Water Program Annual Progress Reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.</p>
Data Reference:	Orange County Stormwater Program. 2004-2007. Unified Annual Progress Reports. Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be sustain free from toxic substances in concentrations that are toxic to, or that produce harmful physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected in Segunda Deshecha Creek upstream of Avenida Presidio.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control conducted according to the County of Oranges quality assurance plan.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 49459, Selenium
Segunda Deshecha Creek

Region 9

LOE ID:	76729
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49459, Selenium

Region 9

Segunda Deshecha Creek

LOE ID:	76737
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Sixteen samples were collected to test for toxicity. Eleven of the 16 samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction and survival, Hyallela biomass, Mysid survival and biomass and purple urchin development and fertilization.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation: The sample was collected at stations SD-AP and SDCM02 Segunda Deshecha Channel.
Temporal Representation: The sample was collected from June 2006 to November 2009.
Environmental Conditions:
QAPP Information: The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	34533	Region 9
Segunda Deshecha Creek		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34533, Phosphorus	Region 9
Segunda Deshecha Creek	

LOE ID:	7762
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of four flow-weighted event mean concentrations exceeded the water quality objective according to results in the Orange County Stormwater Annual Progress reports from 2002 through 2006. Samples were collected during two storm events a year from February 2004 through March 2006.
Data Reference:	Orange County Stormwater Program, 2004-2007, Unified Annual Progress Reports, Program Effectiveness Assessment (San Diego Region)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for the San Diego Basin (9) has a goal of 0.1 mg/L for phosphorus in streams and other flowing waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station in Segunda Deschecha Creek at 33.43338°N, 117.63154°W.
Temporal Representation:	Samples were collected during two storm events a year from February 2004 through March 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34533, Phosphorus
Segunda Deshecha Creek

Region 9

LOE ID:	4732
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 49362
Segunda Deshecha Creek

Region 9

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49362, Cyfluthrin
Segunda Deshecha Creek**

Region 9

LOE ID: 76703

Pollutant: Cyfluthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]

Temporal Representation: Data was collected on a single day 5/14/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	49460	Region 9
Segunda Deshecha Creek		

Pollutant: Silver

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceeded the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 36 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49460, Silver	Region 9
Segunda Deshecha Creek	

LOE ID: 76731

Pollutant: Silver

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Segunda Deshecha Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Segunda Deshecha Creek was collected at 1 monitoring site [Segunda Deshecha Canada above E Avenida Pico - 901S00997]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49460, Silver
Segunda Deshecha Creek

Region 9

LOE ID:	76732
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the 35 samples exceeded the hardness adjusted water quality objective for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Segunda Deshecha Channel at sites SDCM02 and SD-AP.
Temporal Representation:	Samples were collected from September 2006 through May of 2009.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Approximately 70% of the samples were collected after storm events.

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Mateo Creek \(San Diego County\)](#)
Water Body ID: CAR9014000019980911121604
Water Body Type: River & Stream

DECISION ID	52901	Region 9
San Mateo Creek (San Diego County)		

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52901, Alkalinity as CaCO₃	Region 9
San Mateo Creek (San Diego County)	

LOE ID: 76141
Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52927	Region 9
San Mateo Creek (San Diego County)		
Pollutant:	Aluminum	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 52927, Aluminum
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76159
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 52929
San Mateo Creek (San Diego County)**

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 15 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 52929, Arsenic
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76182
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for Arsenic exceeded the CTR criteria of 0.15 mg/L.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule lists criterion continuous concentrations (expressed as a 4-day average) for arsenic to protect aquatic life in freshwater. The CTR criteria for arsenic is 0.15 mg/L. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.

Environmental Conditions:

QAPP Information:

Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 52929, Arsenic

Region 9

San Mateo Creek (San Diego County)

LOE ID: 76181

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 52929, Arsenic

Region 9

San Mateo Creek (San Diego County)

LOE ID: 76179

Pollutant: Arsenic
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	43123	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43123, Benthic Community Effects	Region 9
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San Mateo Creek (San Diego County)

LOE ID:	76198
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was below 40 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 901S00469-San Mateo Canyon above Tenaja Cyn. Cr.
Temporal Representation:	Surveys done May 13, 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43123, Benthic Community Effects**Region 9****San Mateo Creek (San Diego County)**

LOE ID:	76199
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI scores above 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected at station REF-SMC, San Mateo Creek.
Temporal Representation:	The sample was collected in May 2001.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43123, Benthic Community Effects
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76183
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two of the three IBI scores for this water body were below 40. A score below 40 indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following stations: 901SJSMT2-San Mateo Creek 2 901SJSMT3-San Mateo Creek 3
Temporal Representation:	Surveys done May 5, 2008 and May 8, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43123, Benthic Community Effects
San Mateo Creek (San Diego County)
Region 9

LOE ID:	26460
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from May 2001 to June 2005 at three sampling sites. Of the total number of samples, all four of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at three sites: 901SMCDCx, 901SMCSMC, 901SMCSMR on San Mateo Creek.
Temporal Representation:	Sampling occurred during two events on May 2001 and one event on June 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43123, Benthic Community Effects
San Mateo Creek (San Diego County)
Region 9

LOE ID:	79465
Pollutant:	Benthic-Macroinvertebrate Bioassessments

LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples were taken in San Mateo Creek. The CSCI scores for all samples are above the 0.79 threshold, and are therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 901REF-SMC, 901SJSMT2-San Mateo Creek 2, and 901SJSMT3-San Mateo Creek 3, 901S00469-San Mateo Canyon above Tenaja Cyn. Cr.
Temporal Representation:	Surveys done in 2001, 2008, 2009
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project, the County of San Diego MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.

DECISION ID	52944	Region 9
San Mateo Creek (San Diego County)		

Pollutant: Bifenthrin

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52944, Bifenthrin
San Mateo Creek (San Diego County)

Region 9

LOE ID: 76201

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides.](#)

Spatial Representation: Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	52945	Region 9
San Mateo Creek (San Diego County)		

Pollutant: Cadmium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 13 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 13 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52945, Cadmium	Region 9
San Mateo Creek (San Diego County)	

LOE ID: 76216

Pollutant: Cadmium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the twelve samples tested for Cadmium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52945, Cadmium
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76215
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in

freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]

Temporal Representation:

Data was collected on a single day 5/13/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 52945, Cadmium

Region 9

San Mateo Creek (San Diego County)

LOE ID: 76213

Pollutant: Cadmium

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 52975

Region 9

San Mateo Creek (San Diego County)

Pollutant: Chloride

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52975, Chloride
San Mateo Creek (San Diego County)

Region 9

LOE ID: 76229

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for San Mateo Creek (San Diego County) within the San Juan Hydrologic Unit is 250 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]

Temporal Representation:

Data was collected on a single day 5/13/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

52977

Region 9

San Mateo Creek (San Diego County)

Pollutant:

Chromium

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 15 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52977, Chromium

Region 9

San Mateo Creek (San Diego County)

LOE ID:

76233

Pollutant:

Chromium

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52977, Chromium
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76231
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for

Guideline Reference:	sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52977, Chromium
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76244
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for Chromium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID

52990

Region 9

San Mateo Creek (San Diego County)

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 14 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 14 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52990, Copper San Mateo Creek (San Diego County)

Region 9

LOE ID: 76248
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52990, Copper

Region 9

San Mateo Creek (San Diego County)

LOE ID:	76246
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52990, Copper

Region 9

San Mateo Creek (San Diego County)

LOE ID:	75995
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Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the thirteen samples tested for Copper exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (CCC) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID	52991	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52991, Cyfluthrin
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	75997
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

52992

Region 9

San Mateo Creek (San Diego County)

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52992, Cyhalothrin, Lambda San Mateo Creek (San Diego County)

Region 9

LOE ID: 75999

Pollutant: Cyhalothrin, Lambda
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52993	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52993, Cypermethrin	Region 9
San Mateo Creek (San Diego County)	

LOE ID:	76011
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52994	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52994, Deltamethrin
San Mateo Creek (San Diego County)**

Region 9

LOE ID: 76013

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.

Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation: Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**DECISION ID 52995
San Mateo Creek (San Diego County)**

Region 9

Pollutant: Esfenvalerate/Fenvalerate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52995, Esfenvalerate/Fenvalerate
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76029
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 52996
San Mateo Creek (San Diego County)**

Region 9

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52996, Fenpropathrin
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76031
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52997	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52997, Iron		Region 9
San Mateo Creek (San Diego County)		

LOE ID:	76033
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for San Mateo Creek (San Diego County) within the San Juan Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52998	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 15 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52998, Lead
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76049
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 52998, Lead
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76051
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52998, Lead
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76052
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of fourteen samples tested for Lead exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo

Creek converge).

Temporal Representation: Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.

Environmental Conditions:

QAPP Information: Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.

QAPP Information Reference(s):

DECISION ID	52999	Region 9
San Mateo Creek (San Diego County)		

Pollutant: Manganese

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52999, Manganese	Region 9
San Mateo Creek (San Diego County)	

LOE ID: 76067

Pollutant: Manganese

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for San Mateo Creek (San Diego County) within the San Juan Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53000	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 14 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

San Mateo Creek (San Diego County)

LOE ID:	76068
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for mercury exceeded the numeric criteria of 0.77 ug/L.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. The numeric criteria for mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID 53001

Region 9

San Mateo Creek (San Diego County)

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 16 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 16 samples (water) exceeded the guideline/objective, and this sample size (water) is sufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating of fully supporting. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53001, Nickel
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76070
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53001, Nickel
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76084
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53001, Nickel
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76085
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the fifteen samples tested for Nickel exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID 53002		Region 9
San Mateo Creek (San Diego County)		
Pollutant:	Nitrogen, ammonia (Total Ammonia)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 53002, Nitrogen, ammonia (Total Ammonia)
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76161
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia ' Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53003

Region 9

San Mateo Creek (San Diego County)

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. 12 of the 19 samples exceed the Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 12 of 18 samples exceeded the Objective. While this does exceed the allowable frequency listed in Table 3.2 of the Listing Policy, additional lines of evidence required to assess dissolved oxygen in accordance with Section 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53003, Oxygen, Dissolved
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76087
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 6.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53003, Oxygen, Dissolved
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76161
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53003, Oxygen, Dissolved
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76103
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data from 18 samples of Dissolved Oxygen concentrations had 12 exceedances.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the

following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 6.0 mg/l at any time.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from the San Mateo and San Mateo Confluence stations.

Temporal Representation:

Samples were collected from 2007 to 2008

Environmental Conditions:

QAPP Information:

NPDES quality assurance.

QAPP Information Reference(s):

DECISION ID	53009	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53009, Permethrin, total	Region 9
San Mateo Creek (San Diego County)	

LOE ID:	76105
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53010	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53010, Selenium

Region 9

San Mateo Creek (San Diego County)

LOE ID:	76126
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53010, Selenium

Region 9

San Mateo Creek (San Diego County)

LOE ID:	76125
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53011	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53011, Silver
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76128
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53011, Silver
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76129
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	All samples were reported as non-detect.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations two are spatially dependent locations which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge). The spatially independent location includes site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID	53012	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53012, Sulfates
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76143
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for San Mateo Creek (San Diego County) within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 53013
San Mateo Creek (San Diego County)**

Region 9

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Eight of the 24 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 24 samples exceeded the criteria and this does exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, additional data and information is available indicating that standards may be met. Two additional lines of evidence are available.

First, the location of the sampling and timing may not be representative of steelhead habitat utilization in San Mateo, and samples were taken as grabs. Critical information needed to assess temperatures for steelhead include growth periods (spring and fall) as well as summer daytime maximums in documented oversummering habitat.

Second, the criteria of 21 degrees as a limit is not necessarily applicable to southern California steelhead, which have been shown to have higher temperature tolerance. See Spina Environ Biol Fish (2007) 80:23Å–34.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53013, Temperature, water
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76144
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Å°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53013, Temperature, water	Region 9
San Mateo Creek (San Diego County)	

LOE ID:	76145
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Seven of 23 samples exceeded the evaluation guideline.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected from the San Mateo, San Mateo Outlet and San Mateo Confluence stations.
Temporal Representation:	Samples were collected approximately from 2007 to 2008
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	53027	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53027, Total Dissolved Solids
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76163
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for San Mateo Creek (San Diego County) within the San Juan Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

San Mateo Creek (San Diego County)

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in sediment, and waters may be placed on the CWA section 303(d) List for toxicity alone.

One line of evidence is available in the administrative record to assess sediment toxicity. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for not placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exhibited sediment toxicity and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52932, Toxicity

Region 9

San Mateo Creek (San Diego County)

LOE ID: 76164

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and reproduction of *Ceriodaphnia dubia*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S00469.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	53029	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53029, Turbidity	Region 9
San Mateo Creek (San Diego County)	

LOE ID:	76166
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for San Mateo Creek (San Diego County) within the San Juan Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53030	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 15 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53030, Zinc
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76184
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53030, Zinc
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76187
Pollutant:	Zinc

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for Zinc exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Mateo Creek at three locations. Two sample locations are within 200 meters which include: SM1 - San Mateo Creek (just above the I-5 Freeway bridge where a spring re-establishes perennial flow) and San Mateo Outlet (an outlet under the old highway 101 bridge), the results from these stations were averaged. The other sample location is site, SM2 - San Mateo Confluence (at the head of the estuary where two spring fed branches of San Mateo Creek converge.
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 53030, Zinc
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76186
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek (San Diego County) was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53031	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 24 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53031, pH	Region 9
San Mateo Creek (San Diego County)	

LOE ID:	76106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Mateo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Mateo Creek was collected at 1 monitoring site [San Mateo Canyon above Tenaja Cyn. Cr. - 901S00469.]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53031, pH
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76109
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The sample collected did not exceed the objective.
Data Reference:	Data for bacteria in various waterbodies, Feb. 2005-May 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Mateo at mouth station.
Temporal Representation:	One sample was collected on 5/5/2007.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53031, pH

Region 9

San Mateo Creek (San Diego County)

LOE ID:	76108
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 22 samples of pH had no exceedences.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Mateo and San Mateo Confluence stations.
Temporal Representation:	Samples were collected approximately once a month from 2007 to 2008
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	53495	Region 9
San Mateo Creek (San Diego County)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2007 to 2010 show that 12 of 26, 22 of 36, and 9 of 36 single samples exceed the water quality objectives for SSMS of E. coli., enterococcus, and total coliform, respectively, for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
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2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2007 to 2010 show that 12 of 26, 22 of 36, and 9 of 36 single samples exceed the water quality objectives for SSMs of E. coli., enterococcus, and total coliform, respectively, for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 53495, Indicator Bacteria
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76146
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 36 samples exceeded the objective for total coliform.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total coliform shall not exceed 10,000/100ml.
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Samples were collected from San Mateo 1 on San Mateo Creek and San Mateo 2, San Mateo confluence.
Temporal Representation:	Samples were collected from August 2007 to February 2010.
Environmental Conditions:	
QAPP Information:	This data was collected under the Quality Assurance Project Plan for Inland Empire Canyons Baseline Monitoring Project. qa13
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 53495, Indicator Bacteria
San Mateo Creek (San Diego County)**

Region 9

LOE ID:	76014
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	36
Number of Exceedances:	22
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-two of the 36 samples exceeded the objective for enterococcus.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The enterococcus concentration shall not exceed 61/100 ml Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Mateo 1 on San Mateo Creek and San Mateo 2, San Mateo confluence.
Temporal Representation:	Samples were collected from August 2007 to February 2010.
Environmental Conditions:	
QAPP Information:	This data was collected under the Quality Assurance Project Plan for Inland Empire Canyons Baseline Monitoring Project. qa13
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53495, Indicator Bacteria
San Mateo Creek (San Diego County)

Region 9

LOE ID:	76015
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 36 samples exceeded the objective for E. coli.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E. coli concentration shall not exceed 235/100 ml Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Mateo 1 on San Mateo Creek and San Mateo 2, San Mateo confluence.
Temporal Representation:	Samples were collected from August 2007 to February 2010.
Environmental Conditions:	
QAPP Information:	This data was collected under the Quality Assurance Project Plan for Inland Empire Canyons Baseline Monitoring Project. qa13
QAPP Information Reference(s):	

Pollutant:	Invasive Species
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.10 of the Listing Policy. Under this section: A water segment shall be placed on the list if the water segment exhibits concentrations of pollutants or water body conditions for any listing factor that shows a trend of declining water quality standards attainment. In accordance with the Listing Policy, this section is focused on addressing the anti-degradation component of water quality standards and threatened waters as defined in 40 CFR 130.2(j) by identifying trends of declining water quality. Numeric, pollutant specific water quality objectives need not be exceeded for listing.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies was collected for at least 3 years.
2. San Mateo Creek is currently designated as critical habitat for the endangered southern California Steelhead (*O. mykiss*) population segment and has a RARE beneficial use. Designation is based on published surveys of over-summering pools from 1999 to 2003 by the California Department of Fish and Wildlife and subsequent genetic testing that found steelhead in San Mateo Creek (Hovey 2004, Clemento et al. 2009). The surveys identified water diversions and invasive species as potential issues of concern.
3. Two more recent publications on repeat field surveys over multiple years have failed to find a single steelhead during the critical over-summering period (Wilcox 2012, CADFW 2016), despite the continued presence of sufficient over-summering pools that provide suitable habitat for steelhead. However, thousands of competitive and predatory non-native species were found in the pools during the most recent surveys, directly impairing the RARE beneficial use of the critical habitat. The presence of non-natives causes direct impacts through predation and competition for food, as well as indirect impacts due to increases in oxygen demand and thermal stress. No information is available regarding the influence of water diversions on the lack of steelhead presence, though over-summering pools persisted as in prior years.
4. The decline in (lack of documented) steelhead presence in recent surveys and populations sizes of non-natives provides evidence of degradation and thus impairment of the RARE beneficial use.
5. This process is scientifically defensible and reproducible. State of California Department of Fish and Wildlife conducts surveys for steelhead presence and non-native species utilizing standard NOAA approved methods and equipment, and are/will be repeatable for San Mateo Creek.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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LOE ID:	95678
Pollutant:	Invasive Species
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None

Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Published surveys of San Mateo Creek for steelhead and non-natives by the California Department of Fish and Wildlife.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Surveys documenting presence/absence of steelhead and quantity of non-native species.
Guideline Reference:	California Department of Fish and Game. Current Status of Southern Steelhead/Rainbow Trout in San Mateo Creek, California. September 3, 2003 The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys were conducted on San Mateo Creek during the critical summer dry period in over-summering refuge pools.
Temporal Representation:	Surveys done from 1999-2015.
Environmental Conditions:	
QAPP Information:	Data collected by the State of California Department of Fish and Wildlife.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Cristianitos Creek](#)
Water Body ID: CAR9014000020011025104327
Water Body Type: River & Stream

DECISION ID	48367	Region 9
Cristianitos Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 13 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48367, Arsenic	Region 9
Cristianitos Creek	

LOE ID: 73449
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 13

Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the thirteen samples tested for Arsenic exceeded the CTR criteria of 0.15 mg/L.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule lists criterion continuous concentrations (expressed as a 4-day average) for arsenic to protect aquatic life in freshwater. The CTR criteria for arsenic is 0.15 mg/L. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID	48368	Region 9
Cristianitos Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 13 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 48368, Chromium
Cristianitos Creek**

Region 9

LOE ID:	73451
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the thirteen samples tested for Chromium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

**DECISION ID 48369
Cristianitos Creek**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 13 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48369, Copper**Region 9****Cristianitos Creek**

LOE ID:	73452
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the thirteen samples tested for Copper exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (CCC) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).

Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.

Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.

DECISION ID	48372	Region 9
Cristianitos Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 12 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 12 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48372, Lead	Region 9
Cristianitos Creek	

LOE ID:	73455
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of twelve samples tested for Lead exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID	48370	Region 9
Cristianitos Creek		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 13 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48370, Mercury

Region 9

Cristianitos Creek

LOE ID:	73456
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the thirteen samples tested for mercury exceeded the numeric criteria of 0.77 ug/L,
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. Criterion derived from data for inorganic mercury (II), but is applied to total mercury. It will probably be underprotective if a substantial portion of mercury in the water column is methylmercury. Derivation of criterion did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels. The numeric criteria for mercury is 0.77 ug/L. ref13
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID

48374

Region 9

Cristianitos Creek

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of 13 samples exceed the Criteria Continuous Concentration for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceed the Criteria Continuous Concentration for Nickel and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48374, Nickel Cristianitos Creek

Region 9

LOE ID:	73457
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	Zero of the 13 samples tested for Nickel exceeded the hardness adjusted CTR criteria (CCC=168.2 ug/L at a hardness of 400mg/L as CaCO3).
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation: Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).

Temporal Representation: Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.

Environmental Conditions:

QAPP Information: Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.

QAPP Information Reference(s):

DECISION ID	48377	Region 9
Cristianitos Creek		

Pollutant: Nitrate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 33 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 33 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48377, Nitrate	Region 9
Cristianitos Creek	

LOE ID: 77728

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 33

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Data were collected for two separate monitoring sub projects. None of 33 samples exceeded the MCL for nitrate. Samples were reported as nitrate as nitrogen and were converted to nitrate as nitrate before comparing data with the objective.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, San Diego Basin, Objective for Municipal and Domestic Supply uses of inland surface waters states the following: waters shall not contain concentrations of inorganic chemicals in excess of the limits specified in California Code of Regulations, Title 22, Table 64431-A of section 64431 (Inorganic Chemicals). The maximum contaminant level listed in Table 64431-A for nitrate as NO3 is 45.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at CR1 (Upper Cristianitos) and CR2 (Cristianitos).
Temporal Representation:	Samples were collected at CR2 from August 2007 to June 2008 and again from April 2009 to February 2010. Samples were collected from CR1 from January 2008 to May 2008 and again during the months of April 2009 through June 2009 and then on January 2010 and February 2010.
Environmental Conditions:	CR2 has perennial flows due to urban runoff from the Talega housing development. CR1 is approximately 200 yards upstream from CR2 and has intermittent flows. No data were collected at CR1 during the summer since the site is dry during this period.
QAPP Information:	Quality assurance procedures were based on the Inland Empire Canyons Baseline Monitoring Project and adapted to two sub projects; one completed in 2008 for San Mateo Creek and Cristianitos Creek, and another completed in 2010 for San Juan Creek, Mateo Creek, and Cristianitos Creek. qa11
QAPP Information Reference(s):	

DECISION ID	48378	Region 9
Cristianitos Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of 15 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 15 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48378, Oxygen, Dissolved
Cristianitos Creek**

Region 9

LOE ID:	73458
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 15 averages of Dissolved Oxygen concentrations had 1 exceedence.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the CR1 - Upper Cristianitos and CR2 - Cristianitos stations.
Temporal Representation:	Samples were collected approximately once a month from April 2009 to February 2010.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

**DECISION ID 48381
Cristianitos Creek**

Region 9

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of 15

samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 15 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48381, Temperature, water
Cristianitos Creek**

Region 9

LOE ID:	73462
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of 15 samples exceeded the evaluation guideline.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	
Spatial Representation:	Samples were collected from the CR1 - Upper Cristianitos and CR2 - Cristianitos stations.
Temporal Representation:	Samples were collected approximately once a month from August 2007 to June 2008
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 13 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48371, Zinc	Region 9
Cristianitos Creek	

LOE ID:	73464
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the thirteen samples tested for Zinc exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

DECISION ID	48373	Region 9
Cristianitos Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 16 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 16 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48373, pH	Region 9
Cristianitos Creek	

LOE ID:	73459
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Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 16 averages of pH had no exceedences.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the CR1 - Upper Cristianitos and CR2 - Cristianitos stations.
Temporal Representation:	Samples were collected approximately once a month from April 2009 to February 2010.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	48375	Region 9
Cristianitos Creek		

Pollutant:	Cadmium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Seven of the thirteen samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of thirteen samples exceed the CRITERIA and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48375, Cadmium
Cristianitos Creek**

Region 9

LOE ID:	73450
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	Seven of the thirteen samples tested for Cadmium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

**DECISION ID 48376
Cristianitos Creek**

Region 9

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2007 to 2010 show that 19 of 32 and 10 of 33 single samples exceed the water quality objectives for enterococcus, E.Coli., and total coliform of single sample maximums of 61 and 235, respectively, for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2007 to 2010 show that 19 of 32, and 10 of 33 single samples exceed the water quality objectives for enterococcus, and E.coli. of single sample maximums of 61 and 235/100ml, respectively, for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48376, Indicator Bacteria
Cristianitos Creek

Region 9

LOE ID: 73454

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 33
Number of Exceedances: 10

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Ten of the 33 samples exceeded the objective for E. coli.
Data Reference: [Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The E. coli concentration shall not exceed 235/100 ml Basin Plan Region 9.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from CR1, Cristianitos Creek above the urban runoff into Cristianitos creek and CR2, at Cristianitos creek near the end of Avenida Pico.

Temporal Representation: CAR9014000020011025104327
 Environmental Conditions: Samples were collected from August 2007 to February 2010.
 QAPP Information: This data was collected under the Quality Assurance Project Plan for Inland Empire Canyons Baseline Monitoring Project. qa13
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48376, Indicator Bacteria	Region 9
Cristianitos Creek	

LOE ID: 73453

Pollutant: Enterococcus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
 Number of Exceedances: 19

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Nineteen of the 32 samples exceeded the objective for enterococcus.
 Data Reference: [Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The enterococcus concentration shall not exceed 61/100 ml Basin Plan Region 9.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected from CR1, Cristianitos Creek above the urban runoff into Cristianitos creek and CR2, at Cristianitos creek near the end of Avenida Pico.
 CAR9014000020011025104327

Temporal Representation: Samples were collected from August 2007 to February 2010.
 Environmental Conditions:
 QAPP Information: This data was collected under the Quality Assurance Project Plan for Inland Empire Canyons Baseline Monitoring Project. qa13
 QAPP Information Reference(s):

DECISION ID	48379	Region 9
Cristianitos Creek		

Pollutant: Selenium
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2029

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Seven of the eleven samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of eleven samples exceed the CRITERIA and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48379, Selenium
Cristianitos Creek**

Region 9

LOE ID:	73460
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	Seven of the 11 samples tested for Selenium exceeded the CTR criteria of 0.005 mg/L.
Data Reference:	Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The CTR criteria for selenium is 0.005 mg/L or 5 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

Cristianitos Creek

Pollutant: Silver
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 11 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 11 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48380, Silver

Region 9

Cristianitos Creek

LOE ID: 73461

Pollutant: Silver
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 11
Number of Exceedances: 0

Data and Information Type: Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality: All samples were reported as non-detect.
Data Reference: [Data for Various Pollutants in San Mateo, San Juan and Cristianitos, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36

Objective/Criterion Reference:	(section 131.36 revised at 57 FR 60848, December 22, 1992). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Cristianitos Creek at two spatially independent locations which include: CR1 - Upper Cristianitos Creek (above the urban runoff into Cristianitos creek added after rain events established water in the creek) and CR2 - Cristianitos Creek (near the end of Avenida Pico, the Talega housing development).
Temporal Representation:	Samples were collected in 2007 during the months of September, October and November; and in 2008 during the months of January, March and April.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the Quality Assurance Project Plan For Inland Empire Canyons Baseline Monitoring Project prepared by Orange County Coastkeepers and Inland Empire WaterKeepers dated August 8, 2007.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Santa Margarita River \(Lower\)](#)
Water Body ID: CAR9021100019980911161346
Water Body Type: River & Stream

DECISION ID	43092	Region 9
Santa Margarita River (Lower)		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Five of the Nine samples exceed the Water Quality Objective for REC-1 Beneficial Use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of Nine samples exceeded the Water Quality Objective for REC-1 Beneficial Use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43092, Indicator Bacteria	Region 9
Santa Margarita River (Lower)	

LOE ID: 76465
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Non-Contact Recreation

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 43092, Indicator Bacteria

Region 9

Santa Margarita River (Lower)

LOE ID:	76464
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

Line of Evidence (LOE) for Decision ID 43092, Indicator Bacteria**Region 9****Santa Margarita River (Lower)**

LOE ID:	76463
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Enterococci.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 43092, Indicator Bacteria**Region 9****Santa Margarita River (Lower)**

LOE ID:	7504
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	All five samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to two times a year from 2001 - 2006, with the exception of the 2004-2005 monitoring year.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.
Temporal Representation:	Samples were collected one to two times a year from 2001 - 2006, with the exception of the 2004-2005 monitoring year.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43092, Indicator Bacteria
Santa Margarita River (Lower)

Region 9

LOE ID:	7503
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	All five samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to two times a year from 2001 - 2006, with the exception of the 2004-2005 monitoring year.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the bacteriological criteria for enterococcus sets a maximum limit at 61 colonies per 100mL (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.
Temporal Representation:	Samples were collected one to two times a year from 2001 - 2006, with the exception of the 2004-2005 monitoring year.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43092, Indicator Bacteria
Santa Margarita River (Lower)

Region 9

LOE ID:	76542
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary, Santa Margarita Estuary]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47505	Region 9
Santa Margarita River (Lower)		

Pollutant:	2-Methylnaphthalene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47505, 2-Methylnaphthalene
Santa Margarita River (Lower)**

Region 9

LOE ID:	78321
Pollutant:	2-Methylnaphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47438
Santa Margarita River (Lower)

Region 9

Pollutant:
Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Antimony
Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples (sediment) and zero of six samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples (sediment) and zero of six samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47438, Antimony
Santa Margarita River (Lower)

Region 9

LOE ID: 78322

Pollutant: Antimony
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Antimony.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47438, Antimony
Santa Margarita River (Lower)

Region 9

LOE ID:	77838
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for antimony is .006 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 47437
Santa Margarita River (Lower)

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of sediment evidence and two lines of water evidence are available in the administrative record to assess this pollutant. Zero of five samples (sediment) and zero of six samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples (sediment) and zero of six samples (water) exceeded water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47437, Arsenic Santa Margarita River (Lower)

Region 9

LOE ID:	78323
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47437, Arsenic

Region 9

Santa Margarita River (Lower)

LOE ID:	77840
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47437, Arsenic

Region 9

Santa Margarita River (Lower)

LOE ID:	76470
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47437, Arsenic**Region 9****Santa Margarita River (Lower)**

LOE ID:	77841
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47507	Region 9
Santa Margarita River (Lower)		
Pollutant:	Benzo(a)anthracene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 47507, Benzo(a)anthracene		Region 9

Santa Margarita River (Lower)

LOE ID:	78324
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47518

Region 9

Santa Margarita River (Lower)

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47518, Bifenthrin
Santa Margarita River (Lower)**

Region 9

LOE ID:	76472
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence for sediment and two lines of evidence for water are available in the administrative record to assess this pollutant. Zero of four samples (sediment) and zero of six samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples (sediment) and zero of six samples (water) exceeded the water quality objective and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

LOE ID:	76474
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected 11/29/2001-02/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47361, Cadmium

Region 9

Santa Margarita River (Lower)

LOE ID:	77844
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1

Temporal Representation:	monitoring site [Santa Margarita River - 902SMR-MLS]
Environmental Conditions:	Data was collected over the time period 11/29/2001-2/28/2006.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47361, Cadmium

Region 9

Santa Margarita River (Lower)

LOE ID:	77845
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47361, Cadmium

Region 9

Santa Margarita River (Lower)

LOE ID:	78325
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47361, Cadmium

Region 9

Santa Margarita River (Lower)

LOE ID:	76473
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47435	Region 9
Santa Margarita River (Lower)		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47435, Chlordane	Region 9
Santa Margarita River (Lower)	

LOE ID:	72833
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 902SSMR07 (Santa Margarita at Basilone Rd).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47435, Chlordane
Santa Margarita River (Lower)

Region 9

LOE ID:	78326
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).

Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47362	Region 9
Santa Margarita River (Lower)		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples (sediment) and zero of one sample (water) exceeded the water quality objective.

Two lines of evidence (sediment) are available in the administrative record to assess this pollutant. Zero of the five sediment samples exceed the water quality objective, and one line of evidence (water) is available in the administrative record to assess this pollutant. Zero of the five sediment samples exceeded the water quality objectives, and zero of one sample exceeded the water quality objectives.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples (sediment) and zero of one sample (water) exceeded the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47362, Chromium	Region 9
Santa Margarita River (Lower)	

LOE ID: 76476

Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47362, Chromium
Santa Margarita River (Lower)

Region 9

LOE ID:	78328
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47362, Chromium

Region 9

Santa Margarita River (Lower)

LOE ID:	76477
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected on a single day 11/29/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47436	Region 9
Santa Margarita River (Lower)		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. zero of the four samples exceed the water quality objective

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47436, Chrysene (C1-C4)	Region 9
Santa Margarita River (Lower)	

LOE ID:	78332
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47442	Region 9
Santa Margarita River (Lower)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of five samples (sediment) and one of six samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples (sediment) and one of six samples (water) exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47442, Copper	Region 9
Santa Margarita River (Lower)	

LOE ID:	76478
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 47442, Copper
Santa Margarita River (Lower)**

Region 9

LOE ID:	77853
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47442, Copper
Santa Margarita River (Lower)

Region 9

LOE ID:	77852
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban

**Line of Evidence (LOE) for Decision ID 47442, Copper
Santa Margarita River (Lower)**

Region 9

LOE ID:	78333
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47519

Region 9

Santa Margarita River (Lower)

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one

sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47519, Cyfluthrin
Santa Margarita River (Lower)**

Region 9

LOE ID:	77855
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	47525	Region 9
Santa Margarita River (Lower)		

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47525, Cyhalothrin, Lambda	Region 9
Santa Margarita River (Lower)	

LOE ID: 77856
Pollutant: Cyhalothrin, Lambda
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Preservation of Rare & Endangered Species
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA, Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47528	Region 9
Santa Margarita River (Lower)		
Pollutant:	Cypermethrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 47528, Cypermethrin
Santa Margarita River (Lower)**

Region 9

LOE ID:	77857
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47531

Region 9

Santa Margarita River (Lower)

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47531, DDD (Dichlorodiphenyldichloroethane)
Santa Margarita River (Lower)**

Region 9

LOE ID:	76480
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	47532	Region 9
Santa Margarita River (Lower)		

Pollutant: DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47532, DDE (Dichlorodiphenyldichloroethylene)	Region 9
Santa Margarita River (Lower)	

LOE ID: 76481
Pollutant: DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Preservation of Rare & Endangered Species
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47534	Region 9
Santa Margarita River (Lower)		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47534, DDT (Dichlorodiphenyltrichloroethane)	Region 9
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Santa Margarita River (Lower)

LOE ID:	76482
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47536	Region 9
Santa Margarita River (Lower)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is

insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47536, Deltamethrin
Santa Margarita River (Lower)**

Region 9

LOE ID:	77858
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47564	Region 9
Santa Margarita River (Lower)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence is available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of three samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of three samples (water) exceeded the water quality objective and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47564, Diazinon	Region 9
Santa Margarita River (Lower)	

LOE ID:	77831
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47564, Diazinon

Region 9

Santa Margarita River (Lower)

LOE ID:	77834
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon. Three of the six samples could not be used in this assessment because they lacked sufficiently sensitive methods.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47564, Diazinon	Region 9
Santa Margarita River (Lower)	

LOE ID:	77832
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon. Three of the six samples could not be used in this assessment because they lacked sufficiently sensitive methods.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47537	Region 9
Santa Margarita River (Lower)		

Pollutant:	Dibenz[a,h]anthracene
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Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of four samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47537, Dibenz[a,h]anthracene
Santa Margarita River (Lower)

Region 9

LOE ID: 78307

Pollutant: Dibenz[a,h]anthracene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Estuarine Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dibenzo(a, h)anthracene.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47538		Region 9
Santa Margarita River (Lower)		
Pollutant:	Dieldrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 47538, Dieldrin		Region 9
Santa Margarita River (Lower)		
LOE ID:	76461	
Pollutant:	Dieldrin	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	

Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47543	Region 9
Santa Margarita River (Lower)		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective. Zero of two samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum

of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47543, Endrin
Santa Margarita River (Lower)**

Region 9

LOE ID:	76462
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basalone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 47543, Endrin
Santa Margarita River (Lower)**

Region 9

LOE ID:	78310
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: a total of 5 samples were collected and they were all non-detect, however 3 samples were not used in analysis because when the method detection limit was organic carbon normalized, the results were above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Faurey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47544	Region 9
Santa Margarita River (Lower)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47544, Esfenvalerate/Fenvalerate
Santa Margarita River (Lower)**

Region 9

LOE ID:	77835
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

**DECISION ID 47545
Santa Margarita River (Lower)**

Region 9

Pollutant: Fenprothrin

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47545, Fenpropathrin
Santa Margarita River (Lower)

Region 9

LOE ID: 77836

Pollutant: Fenpropathrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47434	Region 9
Santa Margarita River (Lower)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples (sediment) and zero of one sample (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples (sediment) and zero of one sample (water) exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47434, Lead	Region 9
Santa Margarita River (Lower)	

LOE ID:	78314
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Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 47434, Lead
Santa Margarita River (Lower)**

Region 9

LOE ID:	76466
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to

Objective/Criterion Reference:	protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected on a single day 11/29/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47552	Region 9
Santa Margarita River (Lower)		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective. Zero of five samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47552, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
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Santa Margarita River (Lower)

LOE ID:	77837
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47552, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Santa Margarita River (Lower)

LOE ID:	78317
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Faurey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	33317	Region 9
Santa Margarita River (Lower)		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples (sediment) and Zero of four samples (tissue) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples (sediment) and zero of four samples (tissue) exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33317, Mercury
Santa Margarita River (Lower)

Region 9

LOE ID:	78318
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Mercury.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 33317, Mercury
Santa Margarita River (Lower)

Region 9

LOE ID:	76467
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33317, Mercury
Santa Margarita River (Lower)

Region 9

LOE ID:	3012
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 4 samples for mercury in fish tissue taken exceeded the screening value. (TSMP, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA screening value for mercury 0.3 mg/kg (ppm).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Margarita River.
Temporal Representation:	Samples were taken between March 1979 and August 1999.
Environmental Conditions:	
QAPP Information:	CFCP 1998 Year 1 QA Summary Pesticides and PCBs. California Department of Fish and Game.
	CDFG Fish and Wildlife Water Pollution Control Laboratory Data Quality Assurance Report. 1999 Coastal Fish Contamination Program (CFCP Year 2). California Department of Fish and Game.
QAPP Information Reference(s):	

DECISION ID	47546	Region 9
Santa Margarita River (Lower)		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47546, Methyl Parathion	Region 9
Santa Margarita River (Lower)	

LOE ID:	77912
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	47565	Region 9
Santa Margarita River (Lower)		
Pollutant:	Nickel	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence is available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of six samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (sediment) and zero of seven samples (water) exceeded the water quality objective and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 47565, Nickel
Santa Margarita River (Lower)**

Region 9

LOE ID:	77865
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 47565, Nickel
Santa Margarita River (Lower)**

Region 9

LOE ID:	76622
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47565, Nickel

Region 9

Santa Margarita River (Lower)

LOE ID:	77862
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1

Temporal Representation:	monitoring site [Santa Margarita River - 902SMR-MLS]
Environmental Conditions:	Data was collected over the time period 11/29/2001-2/28/2006.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47565, Nickel

Region 9

Santa Margarita River (Lower)

LOE ID:	77863
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 47567

Region 9

Santa Margarita River (Lower)

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47567, Nitrate/Nitrite (Nitrite + Nitrate as N)
Santa Margarita River (Lower)****Region 9**

LOE ID: 77867

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]

Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47568	Region 9
Santa Margarita River (Lower)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the water quality objective and this sample size is insufficient to determine with the power and confidence of the listing policy the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47568, Nitrogen, Nitrite		Region 9
Santa Margarita River (Lower)		

LOE ID:	77868
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 47558		Region 9
Santa Margarita River (Lower)		
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for total PAHs, Zero of four samples exceeded the evaluation guideline for low molecular weight PAHs, and zero of four samples exceeded the evaluation guideline for high molecular weight PAHs.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47558, PAHs (Polycyclic Aromatic Hydrocarbons)
Santa Margarita River (Lower)**

Region 9

LOE ID:	78342
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for PAH, Low molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 47558, PAHs (Polycyclic Aromatic Hydrocarbons)
Santa Margarita River (Lower)**

Region 9

LOE ID:	78341
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47558, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Santa Margarita River (Lower)

LOE ID:	78343
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286

Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	47554	Region 9
Santa Margarita River (Lower)		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective. Zero of five samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47554, PCBs (Polychlorinated biphenyls)	Region 9
Santa Margarita River (Lower)	

LOE ID:	78344
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for PCB, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 47554, PCBs (Polychlorinated biphenyls)

Region 9

Santa Margarita River (Lower)

LOE ID:	72813
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 902SSMR07 (Santa Margarita at Basilone Rd).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47547	Region 9
Santa Margarita River (Lower)		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47547, Permethrin, total	Region 9
Santa Margarita River (Lower)	

LOE ID:	76524
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47561	Region 9
Santa Margarita River (Lower)		
Pollutant:	Phenanthrene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective. Zero of four samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 47561, Phenanthrene
Santa Margarita River (Lower)**

Region 9

LOE ID:	78345
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 47562

Region 9

Santa Margarita River (Lower)

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective. Zero of four samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47562, Pyrene
Santa Margarita River (Lower)**

Region 9

LOE ID:	78346
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

47566

Region 9

Santa Margarita River (Lower)

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the water quality criteria for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the water quality criteria for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47566, Selenium

Region 9

Santa Margarita River (Lower)

LOE ID: 77878

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Selenium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]

Temporal Representation: Data was collected over the time period 11/29/2001-2/28/2006.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47566, Selenium
Santa Margarita River (Lower)

Region 9

LOE ID: 77876

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Selenium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Maximum Contaminant Level for selenium in the Basin Plan is 0.05 mg/L (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]

Temporal Representation: Data was collected over the time period 11/29/2001-2/28/2006.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47566, Selenium
Santa Margarita River (Lower)

Region 9

LOE ID: 77875

Pollutant: Selenium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Selenium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]

Temporal Representation: Data was collected over the time period 11/29/2001-2/28/2006.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	47563	Region 9
Santa Margarita River (Lower)		

Pollutant: Silver
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective. Zero of four samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is

insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47563, Silver
Santa Margarita River (Lower)**

Region 9

LOE ID:	78347
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID 47548
Santa Margarita River (Lower)**

Region 9

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47548, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Santa Margarita River (Lower)

LOE ID: 76543

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47569	Region 9
Santa Margarita River (Lower)		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Â“This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples (sediment) and zero of One samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples (sediment) and zero of One samples (water) exceeded the water quality objective and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47569, Zinc	Region 9
Santa Margarita River (Lower)	

LOE ID:	77882
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Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47569, Zinc
Santa Margarita River (Lower)

Region 9

LOE ID:	77883
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47569, Zinc

Region 9

Santa Margarita River (Lower)

LOE ID:	76556
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 47569, Zinc

Region 9

Santa Margarita River (Lower)

LOE ID:	76563
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected on a single day 11/29/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47569, Zinc

Region 9

Santa Margarita River (Lower)

LOE ID:	78348
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 4 monitoring sites [902_6317, 902_6303, 902_6311, 902_6314]
Temporal Representation:	Data was collected on a single day 8/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	49149	Region 9
Santa Margarita River (Lower)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, additional data and information are available indicating that standards are being met.
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Samples were collected at one site, with two samples exhibiting degradation in biological populations

and/or communities as compared to reference site(s) using the California Stream Condition Index during a 5 year period. More recent data from the Stormwater Monitoring Condition was not included in this listing cycle but confirms this listing. The station also exhibits persistent exceedances associated with water column toxicity and a chlorpyrifos.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects

Region 9

Santa Margarita River (Lower)

LOE ID:	7499
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of six samples exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin has a goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.
Temporal Representation:	Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects

Region 9

Santa Margarita River (Lower)

LOE ID:	7498
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of five samples exceed the water quality objective of 1.0 mg/L for total nitrogen according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.
Temporal Representation:	Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects
Santa Margarita River (Lower)

Region 9

LOE ID:	7497
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of six samples exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to two times a year from 2001-2006 with the exception of the 2004-2005 monitoring year.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote

aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)

A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.

Temporal Representation: Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects
Santa Margarita River (Lower)

Region 9

LOE ID: 76544

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 11
Number of Exceedances: 5

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Eleven samples were collected to test for toxicity. Five of the eleven samples exhibited statistically significant toxicity. The toxicity tests included survival of *Hyalella azteca*, growth of *Selenastrum capricornutum* and survival and reproduction of *Ceriodaphnia dubia*.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at station 902SMR-MLS - Santa Margarita River.

Temporal Representation: The samples were collected from 2001 to 2008.

Environmental Conditions:

QAPP Information: The data was collected under the County of San Diego Co-Permittees Receiving Waters

QAPP Information Reference(s): [Urban Runoff Monitoring and Reporting Program \(Order No. 2007-01\). Data quality is good. e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects
Santa Margarita River (Lower)

Region 9

LOE ID: 7501

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 1

Data and Information Type: Ambient toxicity testing (chronic)
Data Used to Assess Water Quality: Selenastrum capricornutum-
Three samples were collected with one samples showing significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test.

Ceriodaphnia dubia-
Two samples were collected and one samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive test. A fourth sample was collected and tested however the sample temperature was received outside acceptable limits upon laboratory receipt and the results were not used in this assessment.
Hyalella azteca-
Two samples were collected and one sample shows significant toxicity levels (SL) as determined by the Hyalella azteca growth/survival test according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on the following dates: January 14, April 15, May 13, and September 9, 2003.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Monitoring data for Region 9](#)

Spatial Representation: Samples were collected at the monitoring station Santa Margarita 10 located on the main stem of the Lower Santa Margarita River.

Temporal Representation: Samples were collected on the following dates: January 14, April 15, May 13, and September 9, 2003.

Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects
Santa Margarita River (Lower)

Region 9

LOE ID:	77848
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos. Four sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects

Region 9

Santa Margarita River (Lower)

LOE ID:	7500
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5

Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples exceed the water quality objective. according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected on the following dates: January 14, April 15, twice on May 13, and September 9, 2003.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin has a goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The sampling site lies on the lower Santa Margarita River (Santa Margarita 10 (902SSMR10 lat/long: 33.23669/-117.39175)).
Temporal Representation:	Samples were collected on the following dates: January 14, April 15, twice on May 13, and September 9, 2003.
Environmental Conditions:	The first two sampling events occurred between storm events and high base flow respectively. The third and fourth occurred during declining and minimum base flow respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects
Santa Margarita River (Lower)

Region 9

LOE ID:	79700
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six samples were taken at one station in the Santa Margarita River below De Luz Creek. Two had CSCI scores below the 0.79 threshold, and therefore exceed the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at the following stations: 902SMR-CP
Temporal Representation:	The samples were collected from 2003 to 2007.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	e-mail clarifying QAPP information RWB9 Stormwater Monitoring Council CY 2009 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 49149, Benthic Community Effects

Region 9

Santa Margarita River (Lower)

LOE ID:	76471
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven of the eight samples collected had IBI scores below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment

Spatial Representation:	The samples were collected at station SMR-CP Santa Margarita River.
Temporal Representation:	The samples were collected twice a year in May and October from 2003 to 2007.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47511	Region 9
Santa Margarita River (Lower)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the three samples exceed the water quality objective and Zero of One samples exceeded the evaluation guideline for sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the three samples exceed the water quality objective and zero of the one samples exceeded the evaluation guideline for sediment and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47511, Chlorpyrifos		Region 9
Santa Margarita River (Lower)		

LOE ID:	77848
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos. Four sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47511, Chlorpyrifos
Santa Margarita River (Lower)

Region 9

LOE ID:	77851
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47511, Chlorpyrifos

Region 9

Santa Margarita River (Lower)

LOE ID:	76475
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 µg/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita at Basilone Rd - 902SSMR07]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

DECISION ID	43126	Region 9
Santa Margarita River (Lower)		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eight of the 23 samples exceed the Basin Plan water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 23 samples exceed the Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43126, Nitrogen	Region 9
Santa Margarita River (Lower)	

LOE ID:	77868
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43126, Nitrogen

Region 9

Santa Margarita River (Lower)

LOE ID:	7498
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of five samples exceed the water quality objective of 1.0 mg/L for total nitrogen according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin

Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.
Temporal Representation:	Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43126, Nitrogen

Region 9

Santa Margarita River (Lower)

LOE ID:	77867
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Lower) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-2/28/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43126, Nitrogen

Region 9

Santa Margarita River (Lower)

LOE ID:	7497
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of six samples exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to two times a year from 2001-2006 with the exception of the 2004-2005 monitoring year.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.
Temporal Representation:	Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43103	Region 9
Santa Margarita River (Lower)		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Six of 14 water samples exceed the water quality criteria for toxicity. Insufficient number of samples is available to evaluate the toxicity of sediment at this time.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 14 water samples exceed the water quality criteria for toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 43103, Toxicity
Santa Margarita River (Lower)**

Region 9

LOE ID:	76546
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of <i>Hyaella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 902SSMR07.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43103, Toxicity

Region 9

Santa Margarita River (Lower)

LOE ID:	76544
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to test for toxicity. Five of the eleven samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 902SMR-MLS - Santa Margarita River.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43103, Toxicity**Region 9****Santa Margarita River (Lower)**

LOE ID:	30287
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<i>Hyalella azteca</i> - Two samples were collected and neither shows significant toxicity levels (SL) as determined by the <i>Hyalella azteca</i> growth/survival test according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on the following dates: January 14, April 15, May 13, and September 9, 2003.
Data Reference:	Monitoring data for Region 9

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at the monitoring station Santa Margarita 10 located on the main stem of the Lower Santa Margarita River.
Temporal Representation:	Samples were collected on the following dates: January 14, April 15, May 13, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43103, Toxicity
Santa Margarita River (Lower)

Region 9

LOE ID:	7501
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum capricornutum- Three samples were collected with one samples showing significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test.</p> <p>Ceriodaphnia dubia- Two samples were collected and one samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive test. A fourth sample was collected and tested however the sample temperature was received outside acceptable limits upon laboratory receipt and the results were not used in this assessment.</p> <p>Hyalella azteca- Two samples were collected and one sample shows significant toxicity levels (SL) as determined by the Hyalella azteca growth/survival test according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on the following dates: January 14, April 15, May 13, and September 9, 2003.</p>
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report Monitoring data for Region 9

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at the monitoring station Santa Margarita 10 located on the main stem of the Lower Santa Margarita River.
Temporal Representation:	Samples were collected on the following dates: January 14, April 15, May 13, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 43402		Region 9
Santa Margarita River (Lower)		
Pollutant:	Sulfates	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the five samples exceed the Basin Plan water quality objective for sulfates.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the five samples exceed the Basin Plan water quality objective for sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.	
Line of Evidence (LOE) for Decision ID 43402, Sulfates		Region 9
Santa Margarita River (Lower)		

LOE ID:	21195
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five water samples were collected at Santa Margarita River 10 Station 902SSMR10 on January 2003, April 2003, May 2003, and September 2003, Two of the five showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Santa Margarita River 10 Station 902SSMR10; (Latitude 33.2370, Longitude -117.3923).
Temporal Representation:	Samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

DECISION ID	43390	Region 9
Santa Margarita River (Lower)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Ten of the eleven samples exceed the Basin Plan water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d)</p>

list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the eleven samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43390, Phosphorus
Santa Margarita River (Lower)**

Region 9

LOE ID:	7499
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of six samples exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin has a goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on Camp Pendleton under the Basilone Road Bridge.
Temporal Representation:	Samples were collected one to two times a year from 2001-2006, with the exception of the 2004-2005 monitoring year.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43390, Phosphorus
Santa Margarita River (Lower)**

Region 9

LOE ID:	7500
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples exceed the water quality objective. according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected on the following dates: January 14, April 15, twice on May 13, and September 9, 2003.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin has a goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The sampling site lies on the lower Santa Margarita River (Santa Margarita 10 (902SSMR10 lat/long: 33.23669/-117.39175)).
Temporal Representation:	Samples were collected on the following dates: January 14, April 15, twice on May 13, and September 9, 2003.
Environmental Conditions:	The first two sampling events occurred between storm events and high base flow respectively. The third and fourth occurred during declining and minimum base flow respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [De Luz Creek](#)
Water Body ID: CAR9022100020010924135442
Water Body Type: River & Stream

DECISION ID	44303	Region 9
De Luz Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44303, Benthic Community Effects	Region 9
De Luz Creek	

LOE ID: 73499
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 6

Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	None of the six samples collected had IBI scores below 40.
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at station REF-DLC De Luz Creek. R9 says this is the same sites as REF-DLC3. WBs should be combined.
Temporal Representation:	The samples were collected in May and October 2001 to 2004.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 44303, Benthic Community Effects

Region 9

De Luz Creek

LOE ID:	79476
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for all sites on De Luz Creek are above the 0.79 threshold, and therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life.

Objective/Criterion Reference:	Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at station REF-DLC3 (902REF-DLC3), 902REF-DLC
Temporal Representation:	The samples were collected from 2001 to 2004
Environmental Conditions:	
QAPP Information:	The data was collected under the the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 44303, Benthic Community Effects

Region 9

De Luz Creek

LOE ID:	26381
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from November 2000 to October 2003 at one sampling site. None of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary

Guideline Reference:	between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9) A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 902DLCDLM on De Luz Creek.
Temporal Representation:	Sampling occurred during four events from November 2000 to October 2003.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring and Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44303, Benthic Community Effects

Region 9

De Luz Creek

LOE ID:	21183
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at De Luz Creek show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in January 2003, April 2003, May 2003, and September 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek station 3,(902SMDLZ3).
Temporal Representation:	Samples were collected in January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	47876	Region 9
De Luz Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47876, Cadmium	Region 9
De Luz Creek	

LOE ID:	73500
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected from 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47876, Cadmium
De Luz Creek

Region 9

LOE ID:	73501
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected from 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47877

Region 9

De Luz Creek

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47877, Chlorpyrifos

Region 9

De Luz Creek

LOE ID: 73502

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47877, Chlorpyrifos
De Luz Creek

Region 9

LOE ID:	78015
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

33638

Region 9

De Luz Creek

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33638, Copper

Region 9

De Luz Creek

LOE ID: 3026

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by LAW Crandall from 1997 to 2000. None of the 8 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33638, Copper

Region 9

De Luz Creek

LOE ID: 73465

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]

Temporal Representation: Data was collected from 5/13/2003 - 5/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 33638, Copper

Region 9

De Luz Creek

LOE ID: 73466

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected from 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47902	Region 9
De Luz Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47902, Diazinon

Region 9

De Luz Creek

LOE ID: 78016

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]

Temporal Representation: Data was collected over the time period 5/10/2006-5/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47902, Diazinon

Region 9

De Luz Creek

LOE ID: 73467

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49194	Region 9
De Luz Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Four of the Five samples exceed the Single Sample Maximum Objective for Enterococcus, Three of the Five samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Two out of Five samples exceeded the Single Sample Maximum Objective for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the Five samples exceed the Single Sample Maximum Objective for Enterococcus, Three of the Five samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Two out of Five samples exceeded the Single Sample Maximum Objective for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49194, Indicator Bacteria
De Luz Creek**

Region 9

LOE ID:	73474
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected over the time period 5/13/2003-5/9/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49194, Indicator Bacteria
De Luz Creek**

Region 9

LOE ID:	73468
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected over the time period 5/13/2003-5/9/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49194, Indicator Bacteria

Region 9

De Luz Creek

LOE ID:	73469
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz

Temporal Representation:	Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Environmental Conditions:	Data was collected over the time period 5/13/2003-5/9/2007.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47903	Region 9
De Luz Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47903, Lead	Region 9
De Luz Creek	

LOE ID:	73470
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected from 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47903, Lead

Region 9

De Luz Creek

LOE ID:	73471
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected from 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47904	Region 9
De Luz Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47904, Malathion	Region 9
De Luz Creek	

LOE ID:	73472
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47904, Malathion

Region 9

De Luz Creek

LOE ID:	78017
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	52988	Region 9
De Luz Creek		

Pollutant: Nitrogen, Nitrite
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52988, Nitrogen, Nitrite	Region 9
De Luz Creek	

LOE ID: 73473
Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected on a single day 5/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52989	Region 9
De Luz Creek		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52989, Nitrogen, ammonia (Total Ammonia)	Region 9
De Luz Creek	

LOE ID:	73498
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Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected on a single day 5/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	33640	Region 9
De Luz Creek		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the Nine samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33640, Zinc

Region 9

De Luz Creek

LOE ID:	73476
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected from 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33640, Zinc

Region 9

De Luz Creek

LOE ID:	73475
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for De Luz Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for De Luz Creek was collected at 1 monitoring site [De Luz Creek @ De Luz Road (Mile Marker 8 @ private driveway)]
Temporal Representation:	Data was collected from 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33640, Zinc

Region 9

De Luz Creek

LOE ID:	3013
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID33699Region 9

De Luz Creek

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the ten samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the ten samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33699, pHRegion 9

De Luz Creek

LOE ID: 3018

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of 10 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5(minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000. One sample was collected on most days. Two samples were collected on 03/07/200 and 06/01/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33583	Region 9
De Luz Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Four of the Five samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the Five samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33583, Nitrogen	Region 9
De Luz Creek	

LOE ID: 21183

Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at De Luz Creek show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in January 2003, April 2003, May 2003, and September 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek station 3,(902SMDLZ3).
Temporal Representation:	Samples were collected in January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 33583, Nitrogen

Region 9

De Luz Creek

LOE ID:	3020
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall in 1997-1999. Four samples were collected, but only 2 samples were collected on the same day as phosphorus samples, so that the N:P ratio

could be used. One of the 2 ratios was in exceedance of a 10:1 ratio for N:P.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, and all beneficial uses, analagous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation: Samples were collected once each in 12/1997, 05/1998, 11/1998, and 05/1999.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33846	Region 9
De Luz Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33846, Arsenic	Region 9
De Luz Creek	

LOE ID: 3029

Pollutant: Arsenic
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID	34550	Region 9
De Luz Creek		

Pollutant:	Boron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34550, Boron		Region 9
De Luz Creek		

LOE ID:	3028
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Boron is 0.75 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44263	Region 9
De Luz Creek		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. None of 11 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of 11 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44263, Chloride**Region 9****De Luz Creek**

LOE ID:	3027
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/01/2000. Samples were collected once per day on sampling days, but twice on 03/07/2000 and 06/01/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**33586****Region 9****De Luz Creek**

Pollutant:	Cyanide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33586, Cyanide
De Luz Creek**

Region 9

LOE ID:	3025
Pollutant:	Cyanide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 5 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Cyanide is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected once each in 12/1997, 05/1998, 11/1998, 05/1999 and 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID
De Luz Creek**

33585

Region 9

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. One of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33585, Fluoride

Region 9

De Luz Creek

LOE ID:	3024
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. One of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

34609

Region 9

De Luz Creek

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing

Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34609, Mercury
De Luz Creek**

Region 9

LOE ID:	3021
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 5 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected 1-2 times per year from 12/1997 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33704
De Luz Creek**

Region 9

Pollutant:	Oil and Grease
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 8 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. This conclusion is based on the fact that the data shows 1 out of 11 samples had "detectable levels" of oil and grease. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This conclusion is based on the fact that the data shows 1 out of 11 samples had "detectable levels" of oil and grease and this information is insufficient to determine with the confidence and power required by the Listing Policy. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded. A minimum of five samples is needed for application of table 3.2 when there is a numeric water quality objective.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33704, Oil and Grease
De Luz Creek**

Region 9

LOE ID:	3019
Pollutant:	Oil and Grease
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Ten of 11 samples were measured as non-detects, but one of the 11 samples measured 1.33 mg/L.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	

DECISION ID	33772	Region 9
De Luz Creek		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. One of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33772, Phosphorus	Region 9
De Luz Creek	

LOE ID:	3017
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the LAW Crandall from 1997 to 1999. One of the 7 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters and all beneficial uses, the WQO for Total Phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at DeLuz Creek near Fallbrook.
Temporal Representation:	Samples were collected 1-4 times per year from 12/1997 to 05/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43770	Region 9
De Luz Creek		

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 8 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43770, Surfactants (MBAS)	Region 9
De Luz Creek	

LOE ID:	3015
Pollutant:	Surfactants (MBAS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for MBAS is 0.5 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	33637	Region 9
De Luz Creek		
Pollutant:	Total Dissolved Solids	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. One line of evidence is available in the administrative record to assess this pollutant. Two of the 9 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.	
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.	

Line of Evidence (LOE) for Decision ID 33637, Total Dissolved Solids	Region 9
De Luz Creek	
LOE ID:	3014
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Two of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in the Deluz Creek HA, and all beneficial

Objective/Criterion Reference:	uses, the WQO for TDS is 750 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period. Placeholder reference 2006 303(d)
Evaluation Guideline:	These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46111	Region 9
De Luz Creek		

Pollutant:	Iron
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 9 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46111, Iron	Region 9
De Luz Creek	

LOE ID:	3023
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Five of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	34599	Region 9
De Luz Creek		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 9 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34599, Manganese	Region 9
De Luz Creek	

LOE ID:	3022
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Two of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in De Luz Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33683	Region 9
De Luz Creek		

Pollutant:	Sulfates
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 13 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 13 samples exceed the secondary MCL drinking water standard and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33683, Sulfates

Region 9

De Luz Creek

LOE ID:	21185
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected show excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek station 3,(902SMDLZ3).
Temporal Representation:	Samples were collected in January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 33683, Sulfates

Region 9

De Luz Creek

LOE ID:	3016
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Two of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial use, the WQO for Sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Luz Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Rainbow Creek](#)
Water Body ID: CAR9022200019980803102333
Water Body Type: River & Stream

DECISION ID	33947	Region 9
Rainbow Creek		

Pollutant: Iron
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess pollutant. Four of the fifteen samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of fifteen samples exceeded the OBJECTIVE and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33947, Iron	Region 9
Rainbow Creek	

LOE ID: 3060
Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. Two of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33947, Iron

Region 9

Rainbow Creek

LOE ID:	80850
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Iron.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/28/2004 and 04/19/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow

DECISION ID	33865	Region 9
Rainbow Creek		

Pollutant:	Nitrogen
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agricultural Return Flows Nonpoint Source Nurseries Onsite Wastewater Systems (Septic Tanks) Other Urban Runoff Point Source
TMDL Name:	Rainbow Creek
TMDL Project Code:	47
Date TMDL Approved by USEPA:	03/22/2006
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for removal on the section 303(d) list under sections 2.2 and 4.2 of the Listing Policy. Under 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard..</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Sixty-six out of eighty-three exceeded the N:P Ratio in the Basin Plan, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.4. The Rainbow Creek Nutrient TMDL was approved by the RWQCB in 2004 and approved by USEPA on 3/22/2006.5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.
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Line of Evidence (LOE) for Decision ID 33865, Nitrogen	Region 9
Rainbow Creek	

LOE ID:	81110
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Total Nitrogen as N.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

Line of Evidence (LOE) for Decision ID 33865, Nitrogen		Region 9
Rainbow Creek		
LOE ID:	21192	
Pollutant:	Total Nitrogen as N	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	4	
Number of Exceedances:	3	
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)	
Data Used to Assess Water Quality:	Three of the four samples collected at Rainbow Creek show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on January 2003, April 2003, May 2003, and September 2003.	
Data Reference:	Monitoring data for Region 9	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial	

uses (RWQCB, 2007).

A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Rainbow Creek station (902SMRNB4).

Temporal Representation:

Samples were collected on January 2003, April 2003, May 2003, and September 2003.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33865, Nitrogen

Region 9

Rainbow Creek

LOE ID: 3037

Pollutant: Nitrogen

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 25

Number of Exceedances: 18

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by RWQCB9 in 2000. Eighteen of 25 N:P ratios were in exceedance. However, all phosphorus samples were in exceedance of the 0.1 mg/L standard, and if phosphorus levels meet the standard, all 25 nitrogen samples would be in exceedance. Nitrogen levels varied in the creek from 2.1 mg/L (October) to 23 mg/L (June).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Rainbow Creek Station 4, Willow Glen.

Temporal Representation:

Samples were collected 2-4 times per month from 01/2000 to 10/2000

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33865, Nitrogen**Region 9****Rainbow Creek**

LOE ID:	3042
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB from 1997-2000. Six samples were collected, but only 2 samples were collected on the same days that phosphorus samples were collected. Only these two samples were used, because there is currently only the N:P ratio to evaluate nitrogen levels. None of 2 ratios were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected 1-2 times per year from 12/1997 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33865, Nitrogen**Region 9****Rainbow Creek**

LOE ID:	3040
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 2002. For 4 of 9 samples, the N:P ratio exceeded 10:1. However, none of the phosphorus samples met standards, but if they had, all 9 of 9 nitrogen samples would have been considered to be in exceedance.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek station 3, Oak Crest.
Temporal Representation:	Samples were collected 2-4 times per month from 08/2000 to 10/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33865, Nitrogen

Region 9

Rainbow Creek

LOE ID:	3039
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 2000. One sample was collected and was in exceedance of the 10:1 N:P ratio.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek station 2, Hines Nurseries.
Temporal Representation:	One sample was collected on 09/19/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33865, Nitrogen

Region 9

Rainbow Creek

LOE ID:	3038
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Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 2000. Twenty-five of 25 samples, N:P ratios were in exceedance of the 10:1 ratio standard.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek station 5, Riverhouse.
Temporal Representation:	Samples were collected 2-4 times per month from 01/2000 to 10/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33865, Nitrogen

Region 9

Rainbow Creek

LOE ID:	3041
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 2000. Nine of 9 N:P ratios were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters, and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Rainbow Creek station 6, Stage Coach.
Temporal Representation: Samples were collected 2-4 times per month from 08/2000 to 10/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	43695	Region 9
Rainbow Creek		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
TMDL Name:	Rainbow Creek
TMDL Project Code:	47
Date TMDL Approved by USEPA:	03/22/2006
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and [SECTION] of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 4.1 of the Policy.2. The data used satisfies the data quantity requirements of section 4.1 of the Policy.3. Eighty-four of eighty-eight samples exceeded the OBJECTIVE and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.4. The TOTAL MAXIMUM DAILY LOADS (TMDLS) FOR TOTAL NITROGEN AND TOTAL PHOSPHORUS IN THE RAINBOW CREEK WATERSHED was approved by USEPA on 02/09/2005.5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43695, Phosphorus	Region 9
Rainbow Creek	

LOE ID:	3055
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997-1999. Seven of 7 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - streams and other flowing waters and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 02/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43695, Phosphorus

Region 9

Rainbow Creek

LOE ID:	3034
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 2000. Nine of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - streams and other flowing waters, and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek Station 3, Oak Crest.
Temporal Representation:	Samples were collected 2-4 times per month from 08/2000 to 10/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 43695, Phosphorus**Region 9****Rainbow Creek**

LOE ID:	3033
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 2000. One sample was collected. It was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - streams and other flowing waters, and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek at Station 2, Hines Nurseries.
Temporal Representation:	One sample was collected on 09/19/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43695, Phosphorus**Region 9****Rainbow Creek**

LOE ID:	3032
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB in 2000. Twenty-five of 25 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - streams and other flowing waters, and all

beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Rainbow Creek at station 5, Riverhouse.
Temporal Representation: Samples were collected 2-3 times per month form 01/2000 to 10/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43695, Phosphorus
Rainbow Creek

Region 9

LOE ID: 3031

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 25
Number of Exceedances: 25

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB in 2000. Twenty-five of 25 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters - streams and other flowing waters, and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data were collected in Rainbow Creek at Station 4, Willow Glen, near the Willow Glen Rd. Steel Bridge.
Temporal Representation: Samples were collected 2-3 times per month from 01/2000 to 10/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43695, Phosphorus
Rainbow Creek

Region 9

LOE ID: 3035

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB in 2000. Nine of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - streams and other flowing waters, and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek station 6, Stage Coach.
Temporal Representation:	Samples were collected 2-4 times per month from 08/2000 to 10/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43695, Phosphorus

Region 9

Rainbow Creek

LOE ID:	21193
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at Rainbow Creek show excessive phosphorus concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on January 2003, April 2003, May 2003, and September 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	As described in San Diego Basin Plan; inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Rainbow Creek station (902SMRNB4).
Temporal Representation:	Samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43695, Phosphorus

Region 9

Rainbow Creek

LOE ID:	81109
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Phosphorus.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The numeric target for phosphorus according to the Rainbow Creek TMDL is 0.1 mg/L. (San Diego Basin Plan)
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID

53028

Region 9

Rainbow Creek

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 53028, Antimony

Region 9

Rainbow Creek

LOE ID:	80846
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Antimony.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for antimony is .006 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow

DECISION ID	44268	Region 9
Rainbow Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. Zero of the eighteen samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eighteen samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 44268, Arsenic	Region 9
Rainbow Creek	

LOE ID:	80847
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.05 mg/L (Title 22 of the California Code of Regulations)..
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

Line of Evidence (LOE) for Decision ID 44268, Arsenic

Region 9

Rainbow Creek

LOE ID:	3066
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. None of 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

53032

Region 9

Rainbow Creek

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53032, Barium
Rainbow Creek**

Region 9

LOE ID: 80848

Pollutant: Barium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Barium.

Data Reference: [Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for barium is 1 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [

Temporal Representation:	Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Environmental Conditions:	Data was collected between 10/28/2004 and 05/19/2005.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID	43756	Region 9
Rainbow Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this indicator. Ten of 13 samples exceeded the water quality objective for Benthic Community Effects, and Zero of the One samples exceeded the Water Quality Objective for Benthic-Macroinvertebrate Bioassessments.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 13 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area, and Zero of the One samples exceeded the Water Quality Objective for Benthic-Macroinvertebrate Bioassessments and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy, however as required under section 3.9 of the Listing Policy, pollutant(s) could not be directly associated with the Benthic Community Effects. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43756, Benthic Community Effects	Region 9
Rainbow Creek	

LOE ID:	75503
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 902RC-WGR and RC-I15, Rainbow Creek.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43756, Benthic Community Effects
Rainbow Creek

Region 9

LOE ID:	3050
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat quality scores at RC-WGR ranged from 134-144, relatively higher than other sampled waterbodies. BMI ranking scores for RC-WGR were both above and below average compared to other waterbodies. (SDRWQCB, 1999a).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Rainbow Creek 3 riffles upstream of Willow Glen Rd (RC-WGR).
Temporal Representation: Samples were collected in May, September, and November 1998, and May 1999.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43756, Benthic Community Effects

Region 9

Rainbow Creek

LOE ID: 3051

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Not Specified
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Data were collected in 2001 by Stream Team. Taxa Richness was 13.5. The EPT index was 52. Tolerance value was 5. The feeding groups were 32% collectors, 40% filterers, 17% scrapers, 8.8% predators, and 0.5% shredders. (Stream Team, 2001).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Rainbow Creek. Exact sampling location was not reported.
Temporal Representation: Samples were collected in Spring 2001.
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43756, Benthic Community Effects

Region 9

Rainbow Creek

LOE ID: 26440

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 13
Number of Exceedances: 10

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Thirteen samples of IBI data were taken from May 1998 to 2007 at one sampling site. Of the total number of samples, ten samples exceeded the IBI impairment threshold.

Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 902RCWGRx on Rainbow Creek.
Temporal Representation:	Sampling occurred during thirteen events over a ten year period from May 1998 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID	53033	Region 9
Rainbow Creek		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53033, Beryllium
Rainbow Creek**

Region 9

LOE ID:	80849
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Beryllium.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level(MCL) thought to be protective of drinking water for beryllium is 4 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/28/2004 and 05/19/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

**DECISION ID 50049
Rainbow Creek**

Region 9

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Eight samples exceeded the Water Quality Criteria for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 50049, Cadmium

Region 9

Rainbow Creek

LOE ID:	75504
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID	50048	Region 9
Rainbow Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Eight samples exceeded the Water Quality Criteria for Chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50048, Chromium		Region 9
Rainbow Creek		

LOE ID:	75505
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID	43501	Region 9
Rainbow Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Eight samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43501, Copper

Region 9

Rainbow Creek

LOE ID:	75506
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

Line of Evidence (LOE) for Decision ID 43501, Copper

Region 9

Rainbow Creek

LOE ID:	3063
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial uses, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	50050	Region 9
Rainbow Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Eight samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50050, Lead

Region 9

Rainbow Creek

LOE ID: 75507

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]

Temporal Representation: Data was collected between 10/13/2004 and 06/08/2005.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.](#)

DECISION ID 33855

Region 9

Rainbow Creek

Pollutant: Manganese
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollutant

Pollution:

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. One of the eleven total manganese samples and zero of the four dissolved manganese samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of eleven total manganese and zero of four dissolved manganese samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33855, Manganese

Region 9

Rainbow Creek

LOE ID:	3059
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. One of 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Rainbow Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	

QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33855, Manganese
Rainbow Creek

Region 9

LOE ID: 81112

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Manganese.

Data Reference: [Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]

Temporal Representation: Data was collected between 10/28/2004 and 03/19/2005.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.](#)

DECISION ID 33597
Rainbow Creek

Region 9

Pollutant: Mercury
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a one line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the

seven total mercury samples zero of four dissolved mercury samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven total mercury and zero of four dissolved mercury samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33597, Mercury
Rainbow Creek**

Region 9

LOE ID:	3058
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. None of the 7 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected 1-3 times per year from 12/1997 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33597, Mercury
Rainbow Creek**

Region 9

LOE ID:	81104
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Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DPW data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the objective for Mercury.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations (4-day average concentrations) for freshwater aquatic organisms exposure to elemental mercury is 0.77 ug/L.
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected 10/8/2004 - 4/15/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID	50051	Region 9
Rainbow Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50051, Nickel
Rainbow Creek**

Region 9

LOE ID:	75508
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

Pollutant:	Nitrate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53034, Nitrate		Region 9
Rainbow Creek		
LOE ID:	81111	
Pollutant:	Nitrate	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Cold Freshwater Habitat	
Number of Samples:	8	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.	
Data Reference:	Data for Metals, Nutrients, and Inoganics from the County of San Diego Rainbow Creek, 2004-2005.	
SWAMP Data:	Non-SWAMP	

Water Quality Objective/Criterion:	The numeric objective for Nitrate according to the Rainbow Creek TMDL is 10.0 mg/L Nitrate as N. (San Diego Basin Plan)
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID	53035	Region 9
Rainbow Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53035, Selenium	Region 9
Rainbow Creek	

LOE ID:	81106
Pollutant:	Selenium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Selenium.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/13/2004 and 06/08/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID	53036	Region 9
Rainbow Creek		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the CRITERIA and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53036, Silver

Region 9

Rainbow Creek

LOE ID:	81107
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Silver.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/08/2004 and 07/05/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

DECISION ID

43596

Region 9

Rainbow Creek

Pollutant:

Turbidity

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the five samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of five samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43596, Turbidity

Region 9

Rainbow Creek

LOE ID: 81113

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Turbidity.

Data Reference: [Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]

Temporal Representation: Data was collected between 03/19/2005 and 06/08/2005.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.](#)

Line of Evidence (LOE) for Decision ID 43596, Turbidity
Rainbow Creek

Region 9

LOE ID: 3049

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 1998. One sample was collected. It was not in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Rainbow Creek at Willow Glenn Rd.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 34101
Rainbow Creek

Region 9

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the ten samples exceed the Basin Plan water quality objective for zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the ten samples exceed the Basin Plan water quality objective for zinc, and this sample size is insufficient to determine with the power and confidence of the listing policy the applicable beneficial use support rating. At least 16 samples are required to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 34101, Zinc

Region 9

Rainbow Creek

LOE ID:	3052
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected from 1997 to 2000. None of the 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34101, Zinc

Region 9

Rainbow Creek

LOE ID: 75509

Pollutant: Zinc
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 8
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Stage Coach Lane - 902SMG06, and Rainbow Creek at Stage Coach Lane - 902SMG06]

Temporal Representation: Data was collected between 10/13/2004 and 6/8/2005.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.](#)

DECISION ID	33789	Region 9
Rainbow Creek		

Pollutant: Aluminum

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. Three of the five

samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of five samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 33789, Aluminum
Rainbow Creek**

Region 9

LOE ID:	80845
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rainbow Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Aluminum.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Rainbow Creek, 2004-2005.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Rainbow Creek was collected at 2 monitoring sites [Rainbow Creek at Old Highway 395 - 902RBC04, and Rainbow Creek at Stage Coach Lane - 902SMG06]
Temporal Representation:	Data was collected between 10/28/2004 and 05/19/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and MACTEC Flow Monitoring Sampling SOP.

**Line of Evidence (LOE) for Decision ID 33789, Aluminum
Rainbow Creek**

Region 9

LOE ID:	3067
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1999. One sample was collected and was equal to the standard. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	One sample was collected on 12/06/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33723
Rainbow Creek**

Region 9

Pollutant:	Boron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for Boron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 11 samples exceed the Basin Plan water quality objective for Boron, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33723, Boron

Region 9

Rainbow Creek

LOE ID:	3065
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Boron is 0.75 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 44364

Region 9

Rainbow Creek

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. None of the 15 of the samples exceed the Basin Plan water quality objective for chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 of the samples exceed the Basin Plan water quality objective for chloride, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 44364, Chloride		Region 9
Rainbow Creek		
LOE ID:	3064	
Pollutant:	Chloride	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	15	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. None of the 15 samples were in exceedance. (SWRCB, 2003).	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.	
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.	

DECISION ID	34013	Region 9
Rainbow Creek		

Pollutant:	Cyanide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. None of the six samples exceed the Basin Plan water quality objective for cyanide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the six samples exceed the Basin Plan water quality objective for cyanide, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 34013, Cyanide	Region 9
Rainbow Creek	

LOE ID:	3062
Pollutant:	Cyanide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. None of the 6 samples were in

Data Reference:	exceedance. (SWRCB, 2003). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cyanide is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected 1-2 times per year from 12/1997 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43676	Region 9
Rainbow Creek		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. None of 11 of the samples exceed the Basin Plan water quality objective for fluoride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of 11 of the samples exceed the Basin Plan water quality objective for fluoride, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43676, Fluoride	Region 9
Rainbow Creek	

LOE ID:	3061
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43611	Region 9
Rainbow Creek		

Pollutant:	Oil and Grease
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. This conclusion is based on the fact that the data shows 2 out of 15 samples had "detectable levels" of oil and grease. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This conclusion is based on the fact that the data shows 2 out of 15 samples had "detectable levels" of oil and grease and this information is insufficient to determine with the confidence and power required by the Listing Policy. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded. A minimum of five samples is needed for application of table 3.2 when there is a numeric water quality objective.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43611, Oil and Grease
Rainbow Creek**

Region 9

LOE ID:	3057
Pollutant:	Oil and Grease
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. Fifteen samples were collected, 2 samples had detectable levels of oil and grease. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 42353
Rainbow Creek**

Region 9

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. None of the ten samples exceed the Basin Plan water quality objective for surfactants.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the ten samples exceed the Basin Plan water quality objective for surfactants, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 42353, Surfactants (MBAS)		Region 9
Rainbow Creek		
LOE ID:	3053	
Pollutant:	Surfactants (MBAS)	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	10	
Number of Exceedances:	0	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	Data were collected from 1997-2000 by RWQCB9. None of the 10 samples were in exceedance. (SWRCB, 2003).	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for MBAS is 0.5 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.	
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.	

DECISION ID	33596	Region 9
Rainbow Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. None of the 14 samples exceed the Basin Plan water quality objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 14 samples exceed the Basin Plan water quality objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33596, pH	Region 9
Rainbow Creek	

LOE ID:	3056
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997-2000. None of the 14 samples were in

Data Reference:	exceedance. (SWRCB, 2003). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5(minimum) to 8.5(maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000. Samples were collected once on most sampling days, but were collected twice on 12/06/1999, 03/07/2000, and 06/01/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	36317	Region 9
Rainbow Creek		

Pollutant:	Sulfates
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Six of 11 of samples exceed the Basin Plan water quality objective for sulfates.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 11 of samples exceed the Basin Plan water quality objective for sulfates, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
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Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 36317, Sulfates	Region 9
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Rainbow Creek

LOE ID:	3054
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 from 1997 to 2000. Six of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33806	Region 9
Rainbow Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Sixty-nine of 71 of the samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-nine of 71 of the samples exceed the Basin Plan water quality objective for total dissolved solids, and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33806, Total Dissolved Solids
Rainbow Creek**

Region 9

LOE ID:	3046
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 2000. Nine of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected in Rainbow Creek at station 3, Oak Crest.
Temporal Representation:	Samples were collected 2-4 times per month from 08/2000 to 10/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33806, Total Dissolved Solids
Rainbow Creek**

Region 9

LOE ID:	3047
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 2000. Nine of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Rainbow Creek station 6, Stage Coach.
Temporal Representation:	Samples were collected 2-4 times per month from 08/2000 to 10/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33806, Total Dissolved Solids

Region 9

Rainbow Creek

LOE ID:	3045
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 2000. One sample was collected and was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 750 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Rainbow Creek at station 2, Hines Nurseries.
Temporal Representation:	One sample was collected on 09/19/2000.
Environmental Conditions:	

QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33806, Total Dissolved Solids

Region 9

Rainbow Creek

LOE ID: 3044

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 20
Number of Exceedances: 20

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 2000. Twenty of 20 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 750 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline: These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
Guideline Reference: [Placeholder reference 2006 303\(d\)](#)

Spatial Representation: Samples were collected at Rainbow Creek at station 5, Riverhouse.
Temporal Representation: Samples were collected 2-4 times per month from 03/2000 to 10/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33806, Total Dissolved Solids

Region 9

Rainbow Creek

LOE ID: 3043

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 21
Number of Exceedances: 21

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 2000. Twenty of 20 samples were in exceedance. One sample was also collected by RWQCB9 on 06/09/1998. This sample was in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 500 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Rainbow Creek station 4, Willow Glen.
Temporal Representation:	Samples were collected 2-4 times per year from 03/2000 to 10/2000, and on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33806, Total Dissolved Solids

Region 9

Rainbow Creek

LOE ID:	3048
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected from 1997 to 2000. Nine of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HSA 902.22 and all beneficial uses, the WQO for TDS is 500 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	These objectives apply to the lower portion of Murrieta Creek in the Wolf HSA (2.52) and the Santa Margarita River from its beginning at the confluence of Murrieta and Temecula Creeks, through the Gavilan HSA (2.22) and DeLuz HSA (2.21), to where it enters the Upper Ysidora HSA (2.13).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Rainbow Creek near Fallbrook.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sandia Creek](#)
Water Body ID: CAR9022200019991117132333
Water Body Type: River & Stream

DECISION ID	44568	Region 9
Sandia Creek		

Pollutant: Iron
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess pollutant. Six of the 16 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 16 samples exceed the objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44568, Iron	Region 9
Sandia Creek	

LOE ID: 76316
Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44568, Iron

Region 9

Sandia Creek

LOE ID:	76318
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

Line of Evidence (LOE) for Decision ID 44568, Iron**Region 9****Sandia Creek**

LOE ID:	76317
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44568, Iron**Region 9****Sandia Creek**

LOE ID:	76319
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Iron.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Sandia Creek and Santa Margarita River, 2004-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 12/6/2007-11/28/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report.

Line of Evidence (LOE) for Decision ID 44568, Iron

Region 9

Sandia Creek

LOE ID:	76320
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for iron exceeded the numeric criteria of 1 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. The numeric criteria for iron is 1 mg/L.
Guideline Reference:	National recommended water quality criteria: 2002. EPA-822-R-02-047 Washington, D.C. USEPA
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	Quality Assurance Project Plan for Biological and Surface Water Sampling to Lower Santa Margarita River Watershed Monitoring Program.

Line of Evidence (LOE) for Decision ID 44568, Iron

Region 9

Sandia Creek

LOE ID:	3094
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Four of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sampling location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33520	Region 9
Sandia Creek		

Pollutant:	Sulfates
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Six of Twelve samples exceeded the Basin Plan water quality objective for sulfates.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of Twelve samples exceeded the Basin Plan water quality objective for sulfates and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33520, Sulfates

Region 9

Sandia Creek

LOE ID:	76419
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33520, Sulfates

Region 9

Sandia Creek

LOE ID:	3088
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	5

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2001. Five of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sample location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33520, Sulfates

Region 9

Sandia Creek

LOE ID:	76418
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

43160

Region 9

Sandia Creek

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 13 samples exceed the Basin Plan water quality objective for total dissolved solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 13 samples exceed the Basin Plan water quality objective for total dissolved solids and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43160, Total Dissolved Solids Sandia Creek

Region 9

LOE ID:	3069
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 750 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above the confluence.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43160, Total Dissolved Solids

Region 9

Sandia Creek

LOE ID: 76436

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 750 mg/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 43160, Total Dissolved Solids

Region 9

Sandia Creek

LOE ID: 76435

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43160, Total Dissolved Solids Sandia Creek

Region 9

LOE ID:	3070
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Eleven of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in HSA 902.22, and all beneficial uses, the WQO for TDS is 750 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sample location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

48209

Region 9

Sandia Creek

Pollutant: Aldicarb
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48209, Aldicarb

Region 9

Sandia Creek

LOE ID: 76326

Pollutant: Aldicarb
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: None of the four samples exceeded the water quality objective for Aldicarb
Data Reference: [Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Pesticides shall not be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Department of Public Health archived advisory level for aldicarb is 7 ug/L.
Guideline Reference: [CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently](#)

[considered Notification Levels.](#)

Spatial Representation:	Four water samples were collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	Samples were collected one time in 2008 (July), and three times in 2009 (February, April, and July).
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have information about pesticides.
QAPP Information Reference(s):	

DECISION ID	48214	Region 9
Sandia Creek		

Pollutant:	Aldicarb sulfone
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48214, Aldicarb sulfone	Region 9
Sandia Creek	

LOE ID:	76327
Pollutant:	Aldicarb sulfone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the four samples exceeded the water quality objective for Aldicarb sulfone.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The primary MCL for aldicarb sulfone is 3 ug/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Four water samples were collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	Samples were collected one time in 2008 (July), and three times in 2009 (February, April, and July).
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have information about pesticides.
QAPP Information Reference(s):	

DECISION ID	48216	Region 9
Sandia Creek		
Pollutant:	Aldicarb sulfoxide	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48216, Aldicarb sulfoxide

Region 9

Sandia Creek

LOE ID: 76328

Pollutant: Aldicarb sulfoxide
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: No samples exceeded the water quality objective for Aldicarb sulfoxide.
Data Reference: [Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation byreference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The drinking water standard maximum MCL is 3 ug/L.
Guideline Reference: [2011 Edition of the Drinking Water Standards and Health Advisories](#)

Spatial Representation: Four water samples were collected from single location.
Temporal Representation: Samples were collected one time in 2008 (October), and three times in 2009 (February, April, and July).

Environmental Conditions:
QAPP Information: The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have information about pesticides.

QAPP Information Reference(s):

DECISION ID 48219

Region 9

Sandia Creek

Pollutant: Aldrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero

samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the zero samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48219, Aldrin
Sandia Creek**

Region 9

LOE ID:	76329
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The reporting limit for the six non-detect samples was 0.5 ng/L which is greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxic Rule for Aldrin in sources of drinking water is 0.13 ng/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Six water samples were collected from single location.
Temporal Representation:	Samples were collected one time in 2007 (November), two samples in 2008 (July & October), and three times in 2009 (February, April, and July).
Environmental Conditions:	
QAPP Information:	Data is complete includes QAPP only minor elements missing
QAPP Information Reference(s):	

DECISION ID

48222

Region 9

Sandia Creek

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the objectives.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48222, Alkalinity as CaCO₃

Region 9

Sandia Creek

LOE ID: 76336

Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO₃.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48222, Alkalinity as CaCO3

Region 9

Sandia Creek

LOE ID:	76330
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

43108

Region 9

Sandia Creek

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43108, Aluminum
Sandia Creek

Region 9

LOE ID:	76337
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 43108, Aluminum

Region 9

Sandia Creek

LOE ID: 3099

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by LAW Crandall in 1999. One sample was collected, it's Aluminum level was equal to the WQO. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial uses, the WQO for aluminum is 0.2 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation: One sample was collected on 12/06/1999.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43108, Aluminum

Region 9

Sandia Creek

LOE ID: 76339

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43108, Aluminum

Region 9

Sandia Creek

LOE ID:	76338
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43108, Aluminum

Region 9

Sandia Creek

LOE ID:	76340
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of the eight samples tested for aluminum exceeded the numeric criteria of 0.087 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect aquatic organisms from chronic exposures (expressed as 4-day average concentration) in freshwater. The numeric criteria for aluminum is 0.087 mg/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

DECISION ID	33028	Region 9
Sandia Creek		
Pollutant:	Antimony	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan water quality objective for antimony.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. A single sample was collected and it did not exceed the Basin Plan water quality objective for antimony and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33028, Antimony

Region 9

Sandia Creek

LOE ID:	3071
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek at Sandia Creek Rd, 0.5-1.0 mile above the confluence.
Temporal Representation:	The sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33028, Antimony

Region 9

Sandia Creek

LOE ID:	76351
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceeded the water quality evaluation guideline.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Criteria: Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for antimony is 6 ug/L.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

DECISION ID	36728	Region 9
Sandia Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Zero of one samples (sediment) and one of 13 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples (sediment) and one of 13 samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36728, Arsenic

Region 9

Sandia Creek

LOE ID:	76362
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36728, Arsenic

Region 9

Sandia Creek

LOE ID:	76363
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality:	None of the eight samples tested for arsenic exceeded the numeric criteria of 0.15 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule lists criterion continuous concentrations (expressed as a 4-day average) for dissolved arsenic to protect aquatic life in freshwater. The numeric criteria for arsenic is 0.15 mg/L.
Guideline Reference:	
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36728, Arsenic

Region 9

Sandia Creek

LOE ID:	76364
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of the eight samples exceeded the 0.004 ppb value, the rest were with MDLs greater than 0.004 ppb.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Office of Environmental Hazard and Health Assessment, Public Health Goal (PHG) for arsenic is 0.004 ug/L.
Guideline Reference:	Public Health Goal for Arsenic in Drinking Water
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36728, Arsenic**Region 9****Sandia Creek**

LOE ID:	76359
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36728, Arsenic**Region 9****Sandia Creek**

LOE ID:	76360
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36728, Arsenic

Region 9

Sandia Creek

LOE ID:	3072
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation:	One sample was collected in 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36728, Arsenic

Region 9

Sandia Creek

LOE ID:	3073
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sampling location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36728, Arsenic

Region 9

Sandia Creek

LOE ID:	76361
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36728, Arsenic

Region 9

Sandia Creek

LOE ID:	76352
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	43771	Region 9
Sandia Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion:

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects	Region 9
Sandia Creek	

LOE ID: 79466

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for all sites on Sandia Creek are above the 0.79 threshold, and therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations 902REF-SC, REF-SC2, 902SMSND3, 902S01097
Temporal Representation:	The samples were collected from 2001 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project, the County of San Diego MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects
Sandia Creek

Region 9

LOE ID:	76405
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of eight samples tested for total selenium exceeded the criteria of 5 ug/L.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (expressed as a 4-day average concentration) for selenium to protect aquatic life in freshwater. The criteria for selenium is 5 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	76438
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 902S01097.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	76340
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of the eight samples tested for aluminum exceeded the numeric criteria of 0.087 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect aquatic organisms from chronic exposures (expressed as 4-day average concentration) in freshwater. The numeric criteria for aluminum is 0.087 mg/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	76436
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 750 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	76419
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	76415
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the eight samples tested for dissolved silver exceeded the numeric criteria promulgated to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	76402
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	76373
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the fourteen samplea collected had IBI scores below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	

Spatial Representation:	The samples were collected at stations 902REF-SC and REF-SC2, Sandia Creek.
Temporal Representation:	The samples were collected twice a year in May and October from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects
Sandia Creek

Region 9

LOE ID:	76372
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was above 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 902S01097-Sandia Canyon Creek ~1.9mi above De Anza Rd.
Temporal Representation:	Surveys done May 11, 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects
Sandia Creek

Region 9

LOE ID:	3100
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected by the "Stream Team" in 2001. Taxa richness was 13.0, the EPT index was 88, and tolerance value was 3.8. The majority of macroinvertebrates were collectors and filterers. (Stream Team, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not given.
Temporal Representation:	Samples were collected in Spring of 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Sandia Creek

Region 9

LOE ID:	26461
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Fourteen samples of IBI data were taken from May 1998 to October 2003 at three sampling sites. Of the total number of samples, three of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at three sites: 902SCSCRx, 902SCDLRx, 902SMSND3 on Sandia Creek.
Temporal Representation:	Sampling occurred during one to three events annually from May 1998 to October 2003.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects

Region 9

Sandia Creek

LOE ID:	27025
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples of IBI data were taken from May 2004 to May 2007 at one sampling site. Of the total number of samples, one of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: REF-SC2 on Sandia Creek.
Temporal Representation:	Sampling occurred during May and October annually over a three year period from May 2004 to October 2006 and during May in 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects**Region 9****Sandia Creek**

LOE ID:	76370
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	US Bureau of Reclamation data from the Marine Corps Military Base at Camp Pendleton. Twelve out of 27 samples exceeded the criteria from the Basin Plan.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Regional Water Quality Control Board Basin Plan the discharge of wastes shall not cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sandia Creek near Fallbrook at USGS gage #11044350 (33.424444,-117.248333)
Temporal Representation:	Samples were taken from Nov 2007 to May 2010.
Environmental Conditions:	
QAPP Information:	Quality Assurance Project Plan for Biological and Surface Water Sampling -- Hydrologic and Biological Support for Lower Santa Margarita Watershed Program. Prepared for the United States Bureau of Reclamation by Stetson Engineering Inc. Oct. 2007 tr50
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43771, Benthic Community Effects**Region 9****Sandia Creek**

LOE ID:	76371
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score was above 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 902SMSND3-Sandia Creek 3
Temporal Representation:	Surveys done May 6, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

DECISION ID	32823	Region 9
Sandia Creek		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan water quality objective for beryllium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A single sample was collected and it did not exceed the Basin Plan water quality objective for beryllium and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32823, Beryllium	Region 9
Sandia Creek	

LOE ID:	76374
Pollutant:	Beryllium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of eight samples exceeded the Dept. of Health Services maximum contamination level (MCL).
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for beryllium is 4 ug/L.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32823, Beryllium

Region 9

Sandia Creek

LOE ID:	3074
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	48397	Region 9
Sandia Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the eight samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48397, Bifenthrin	Region 9
Sandia Creek	

LOE ID:	76375
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48397, Bifenthrin

Region 9

Sandia Creek

LOE ID:	76383
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The samples did not exceed the evaluation guideline for permethrin.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Maximum Concentration (1-hour average) is 0.03 ug/L. California Fish and Game Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. (PDF, 2 mb)
Guideline Reference:	Aquatic Life Criteria for Pyrethroid Insecticides (DFG Administrative Report 00-6, 2000)
Spatial Representation:	One water sample was collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample was collected one time in July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

Sandia Creek

LOE ID:	76382
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

44614

Region 9

Sandia Creek

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of nine samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of nine samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID:	76399
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceeded the objective.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.
Guideline Reference:	
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in November 2007, 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID: 76384

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID:	76396
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation: Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID: 76395
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP
Water Quality Objective/Criterion: The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID: 76387
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID:	3075
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 44614, Cadmium**Region 9****Sandia Creek**

LOE ID:	76398
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for cadmium exceeded the numeric criteria of 0.00246 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992). California Toxics Rule (CTR) lists criterion continuous concentrations for cadmium to protect aquatic life in freshwater. The cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2007, 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44614, Cadmium**Region 9****Sandia Creek**

LOE ID:	76397
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID:	76386
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]

Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44614, Cadmium

Region 9

Sandia Creek

LOE ID:	76385
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

48414

Region 9

Sandia Creek

Pollutant:	Carbaryl
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four

samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48414, Carbaryl

Region 9

Sandia Creek

LOE ID:	76400
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the samples exceeded the guidelines.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Fish and Game for the Insecticide Carbaryl To Aquatic Life In The Sacramento-San Joaquin River Ssystem criteria value is 2.53 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbaryl to Aquatic Organisms in the Sacramento-San Joaquin River System. State of California Department of Fish and Game
Spatial Representation:	Four water sample were collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample were collected one time in October 2008, February, April and July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP)has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID

48415

Region 9

Sandia Creek

Pollutant: Carbofuran
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48415, Carbofuran

Region 9

Sandia Creek

LOE ID: 76408

Pollutant: Carbofuran
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: None of the four samples exceeded the water quality objective for Carbofuran.
Data Reference: [Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in Table 64449-A of section 64449 of Title 22 of the California Code of Regulations (Secondary Maximum Contaminant Levels, Consumer Acceptance Limits) which is incorporated by reference into this plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The MCL for carbofuran is 18 ug/L.
Guideline Reference:	
Spatial Representation:	Four water sample were collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample were collected one time in October 2008, February, April and July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have information about pesticides.
QAPP Information Reference(s):	

DECISION ID	43052	Region 9
Sandia Creek		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43052, Chloride	Region 9
Sandia Creek	

LOE ID:	3097
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. One of 15 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43052, Chloride

Region 9

Sandia Creek

LOE ID:	76411
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43052, Chloride

Region 9

Sandia Creek

LOE ID:	76410
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43052, Chloride

Region 9

Sandia Creek

LOE ID:	76409
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 43052, Chloride

Region 9

Sandia Creek

LOE ID: 76412

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

48417

Region 9

Sandia Creek

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48417, Chlorpyrifos
Sandia Creek**

Region 9

LOE ID:	78134
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48417, Chlorpyrifos

Region 9

Sandia Creek

LOE ID: 76413

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).

Guideline Reference: [Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]

Temporal Representation: Data was collected over the time period 5/10/2006-5/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

32824

Region 9

Sandia Creek

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and

3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of one samples (sediment) and one of ten samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples (sediment) and one of ten samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32824, Chromium

Region 9

Sandia Creek

LOE ID: 76422

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 32824, Chromium

Region 9

Sandia Creek

LOE ID: 76430
Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP
Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 32824, Chromium

Region 9

Sandia Creek

LOE ID: 76432
Pollutant: Chromium
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of eight samples exceeded the Dept. of Health Services maximum contamination level (MCL).
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for chromium, total is 50 ug/L.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in November 2007, 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32824, Chromium

Region 9

Sandia Creek

LOE ID:	76423
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]

Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32824, Chromium**Region 9****Sandia Creek**

LOE ID:	3076
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for total chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32824, Chromium**Region 9****Sandia Creek**

LOE ID:	76421
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32824, Chromium

Region 9

Sandia Creek

LOE ID:	76420
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32824, Chromium

Region 9

Sandia Creek

LOE ID:	76431
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for total chromium exceeded the numeric criteria to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

DECISION ID

44615

Region 9

Sandia Creek

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Zero of one samples (sediment) and one of 15 samples (water) exceeded the water quality objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples (sediment) and one of 15 samples (water) exceeded the water quality objective and together, this sample size is sufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 44615, Copper
Sandia Creek**

Region 9

LOE ID:	76433
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 44615, Copper
Sandia Creek**

Region 9

LOE ID:	76441
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID:	76442
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID: 76443

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID: 76444

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID:	76445
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID:	76446
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the eight samples tested for copper exceeded the numeric criteria to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2007 during the month of November, 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID:	3077
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID:	3078
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sample location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44615, Copper

Region 9

Sandia Creek

LOE ID:	76434
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48418	Region 9
Sandia Creek		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>[NUMBER] lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48418, Cyfluthrin
Sandia Creek**

Region 9

LOE ID:	76454
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 48418, Cyfluthrin
Sandia Creek**

Region 9

LOE ID:	76453
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48420	Region 9
Sandia Creek		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48420, Cyhalothrin, Lambda Sandia Creek

Region 9

LOE ID:	76455
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48420, Cyhalothrin, Lambda Sandia Creek

Region 9

LOE ID:	76456
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48424	Region 9
Sandia Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 48424, Cypermethrin**Region 9****Sandia Creek**

LOE ID:	76303
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48424, Cypermethrin**Region 9****Sandia Creek**

LOE ID:	76457
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was

Data Reference:	non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48424, Cypermethrin Sandia Creek

Region 9

LOE ID:	76304
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The samples did not exceed the water quality objective for Cypermethrin.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA IRIS Reference Dose (RfD) as a drinking water level limit is 70 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	One water sample was collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample was collected one time in July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID

48431

Region 9

Sandia Creek

Pollutant: Deltamethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48431, Deltamethrin

Region 9

Sandia Creek

LOE ID: 76305

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48431, Deltamethrin

Region 9

Sandia Creek

LOE ID:	76306
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

48434

Region 9

Sandia Creek

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48434, Diazinon Sandia Creek

Region 9

LOE ID:	76307
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48434, Diazinon

Region 9

Sandia Creek

LOE ID: 78132

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]

Temporal Representation: Data was collected over the time period 5/10/2006-5/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 48231

Region 9

Sandia Creek

Pollutant: Endrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48231, Endrin
Sandia Creek**

Region 9

LOE ID:	76308
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the six samples exceeded the water quality objective for Endrin.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	CTR human health for drinking water is 0.76 ug/l
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Six water samples were collected from USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	Samples were collected one time in 2007 (November), two times in 2008 (July & October) and three times in 2009 (February, April, and July).
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have information about pesticides.

DECISION ID	48438	Region 9
Sandia Creek		

Pollutant: Esfenvalerate/Fenvalerate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48438, Esfenvalerate/Fenvalerate	Region 9
Sandia Creek	

LOE ID: 76311
Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48438, Esfenvalerate/Fenvalerate

Region 9

Sandia Creek

LOE ID:	76310
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

48439

Region 9

Sandia Creek

Pollutant:

Fenpropathrin

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 3.1 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48439, Fenpropathrin
Sandia Creek

Region 9

LOE ID: 76314

Pollutant: Fenpropathrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).

Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48439, Fenpropathrin

Region 9

Sandia Creek

LOE ID:	76315
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

51174

Region 9

Sandia Creek

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Four of the Five samples exceed the Water Quality Objective for Enterococcus, Two of the Twelve samples exceeded the Water Quality Objective for Fecal Coliform, and Two of the Ten samples exceeded the Evaluation Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the Five samples exceed the Water Quality Objective for Enterococcus, Two of the Twelve samples exceeded the Water Quality Objective for Fecal Coliform, and Two of the Ten samples exceeded the Evaluation Guideline for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51174, Indicator Bacteria

Region 9

Sandia Creek

LOE ID:	76309
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 5/13/2003-7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s): Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51174, Indicator Bacteria

Region 9

Sandia Creek

LOE ID: 76312

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]

Temporal Representation: Data was collected over the time period 5/13/2003-7/14/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51174, Indicator Bacteria

Region 9

Sandia Creek

LOE ID: 76313

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the seven samples exceeded the fecal coliform objective.

Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The fecal coliform concentration shall not exceed more than 10 percent of total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Sandia Creek near Fallbrook. CAR9022200019991117132333
Temporal Representation:	Samples were collected from January 2008 to July 2009.
Environmental Conditions:	
QAPP Information:	This data was collected under the Quality Assurance Project Plan for Biological and Surface Water Sampling.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51174, Indicator Bacteria

Region 9

Sandia Creek

LOE ID:	76428
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 5/13/2003-7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Sandia Creek

LOE ID:	76429
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the five samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Total coliform shall not exceed 10,000/100ml.
Objective/Criterion Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Sandia Creek near Fallbrook.
Temporal Representation:	The samples were collected January 2008 to July 2009.
Environmental Conditions:	
QAPP Information:	This data was collected under the Quality Assurance Project Plan for Biological and Surface Water Sampling.
QAPP Information Reference(s):	

DECISION ID

48448

Region 9

Sandia Creek

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of Eight samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of Eight samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48448, Lead

Region 9

Sandia Creek

LOE ID:	76325
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48448, Lead

Region 9

Sandia Creek

LOE ID:	76331
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48448, Lead Sandia Creek

Region 9

LOE ID:	76324
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.

Objective/Criterion Reference: Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]

Temporal Representation: Data was collected on a single day 5/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48448, Lead
Sandia Creek

Region 9

LOE ID: 76323

Pollutant: Lead

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]

Temporal Representation: Data was collected on a single day 5/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 48448, Lead
Sandia Creek

Region 9

LOE ID: 76322

Pollutant: Lead

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48448, Lead

Region 9

Sandia Creek

LOE ID:	76333
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of eight samples exceeded the OEHHA MCL/Action Level.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed. 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Office of Environmental Hazard and Heath Assessment MCL is 15 ug/L for Lead.
Guideline Reference:	
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in November 2007, 2008 during the months of January, April, July

and October and in 2009 during the months of February, April and July.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Marine Corps Base Camp Pendleton - Sandia Creek

Line of Evidence (LOE) for Decision ID 48448, Lead

Region 9

Sandia Creek

LOE ID:	76332
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for lead exceeded the numeric criteria of 0.0032 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a hardness of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in November 2007, 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48448, Lead

Region 9

Sandia Creek

LOE ID:	76321
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48450		Region 9
Sandia Creek		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 48450, Malathion**Region 9****Sandia Creek**

LOE ID:	76334
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48450, Malathion**Region 9****Sandia Creek**

LOE ID:	78133
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for

Data Reference:	Malathion. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	33925	Region 9
Sandia Creek		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the Basin Plan water quality objective for mercury.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 15 samples exceed the Basin Plan water quality objective for mercury and this this sample size is insufficient to determine with the power and confidence of the listing policy the applicable beneficial use support rating. A minimum of 16 samples are required to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33925, Mercury	Region 9
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Sandia Creek

LOE ID:	3079
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33925, Mercury**Region 9****Sandia Creek**

LOE ID:	76346
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of eight samples exceeded Basin Plan Objective for Mercury.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33925, Mercury

Region 9

Sandia Creek

LOE ID:	76345
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for mercury exceeded the numeric criteria of 0.77 ug/L, promulgated to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. Criterion derived from data for inorganic mercury (II), but is applied to total mercury. It will probably be underprotective if a substantial portion of mercury in the water column is methylmercury. Derivation of criterion did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels. The numeric criteria for mercury is 0.77 ug/L.
Guideline Reference:	National recommended water quality criteria: 2002. EPA-822-R-02-047 Washington, D.C. USEPA
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33925, Mercury

Region 9

Sandia Creek

LOE ID:	3080
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sampling location was not reported.
Temporal Representation:	Samples were collected 1-2 times per year from 12/1997 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	51115	Region 9
Sandia Creek		

Pollutant:	Methiocarb
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Methiocarb.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Water Quality Criteria for Methiocarb and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 51115, Methiocarb**Region 9****Sandia Creek**

LOE ID:	76347
Pollutant:	Methiocarb
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The detection limit is higher than the criteria for Methiocarb so the data cannot be used for assessment purposes.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The U.S.EPA Ecotox value for continuous concentration 4-day average is 1/10th of LC50 is 0.075 ug/L.
Guideline Reference:	Ecotox database
Spatial Representation:	Four water sample were collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample were collected one time in October 2008, February, April and July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID**48451****Region 9****Sandia Creek**

Pollutant:	Methomyl
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48451, Methomyl

Region 9

Sandia Creek

LOE ID:	76353
Pollutant:	Methomyl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the four samples exceeded the evaluation guideline for Methomyl.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Fish and Game Hazard Assessment of the Insecticide Methomyl to Aquatic Organisms in the San Joaquin River System is 0.52 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methomyl to Aquatic Life in the Sacramento-San Joaquin River System
Spatial Representation:	Four water sample were collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample were collected one time in October 2008, February, April and July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID

37259

Region 9

Sandia Creek

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating chemical concentrations with sediment toxicity to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the Nine samples collected exceed the Water Quality Objective, and Zero of the One sample exceeded the Evaluation Guideline for Nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the Nine samples collected exceed the Water Quality Objective, and Zero of the One sample exceeded the Evaluation Guideline for Nickel and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37259, Nickel Sandia Creek

Region 9

LOE ID:	3081
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37259, Nickel

Region 9

Sandia Creek

LOE ID: 76356

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 37259, Nickel

Region 9

Sandia Creek

LOE ID: 76354

Pollutant: Nickel
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37259, Nickel

Region 9

Sandia Creek

LOE ID:	76358
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Nickel criteria for the protection of human health from consumption of organisms only is 4.6 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37259, Nickel**Region 9****Sandia Creek**

LOE ID:	76357
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37259, Nickel**Region 9****Sandia Creek**

LOE ID:	76366
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples tested for dissolved nickel exceeded the numeric criteria promulgated to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36

Objective/Criterion Reference:	(section 131.36 revised at 57 FR 60848, December 22, 1992). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (expressed as a 4-day average concentration) for dissolved nickel to protect aquatic life in freshwater. The nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a hardness of 100 mg/L was used
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2007 on November, 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

DECISION ID	51117	Region 9
Sandia Creek		

Pollutant:	Oxamyl (Vydate)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Oxamyl (Vydate).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Four samples exceeded the Water Quality Criteria for Oxamyl (Vydate) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51117, Oxamyl (Vydate)	Region 9
Sandia Creek	

LOE ID:	76380
Pollutant:	Oxamyl (Vydate)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the four samples exceeded the water quality objective for Oxamyl.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in Table 64449-A of section 64449 of Title 22 of the California Code of Regulations (Secondary Maximum Contaminant Levels, Consumer Acceptance Limits) which is incorporated by reference into this plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The MCL for oxamyl is 50 ug/L.
Guideline Reference:	
Spatial Representation:	Four water sample were collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample were collected one time in October 2008, February, April and July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID	51154	Region 9
Sandia Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the Water Quality Objective for Oxygen, Dissolved.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 25 samples exceeded the Water Quality Objective for Oxygen, Dissolved and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51154, Oxygen, Dissolved
Sandia Creek**

Region 9

LOE ID:	72808
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 24 averages of Dissolved Oxygen concentrations had 0 exceedances.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook.
Temporal Representation:	Samples were collected twice a month from November 2007 to July 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	Quality Assurance Project Plan for Biological and Surface Water Sampling to Lower Santa Margarita River Watershed Monitoring Program.

**Line of Evidence (LOE) for Decision ID 51154, Oxygen, Dissolved
Sandia Creek**

Region 9

LOE ID:	80736
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 6.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51154, Oxygen, Dissolved

Region 9

Sandia Creek

LOE ID:	76381
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Data was collected on a single day 5/11/2009.
Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	51156	Region 9
Sandia Creek		

Pollutant:	Pendimethalin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Pendimethalin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Pendimethalin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51156, Pendimethalin	Region 9
Sandia Creek	

LOE ID:	76389
Pollutant:	Pendimethalin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The sample did not exceeded the evaluation guideline for Pendimethalin.

Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA IRIS Reference Dose (RfD) as a drinking water level limit is 280 ug/L.
Guideline Reference:	IRIS Summary for Pendimethalin
Spatial Representation:	One water sample was collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample was collected one time in July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID	51158	Region 9
Sandia Creek		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Permethrin, total.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Permethrin, total and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51158, Permethrin, total	Region 9
Sandia Creek	

LOE ID:	76390
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Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51158, Permethrin, total
Sandia Creek

Region 9

LOE ID:	76392
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The reporting limit for the non-detect sample was 0.01 ug/L which is greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	National Recommended Water Quality Criteria is 0.03 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	One water sample was collected from single location at Sandia Creek near Fallbrook USGS Gage #11044350 (sampling point coincident with gage), Santa Margarita River Watershed.
Temporal Representation:	The sample was collected one time in July of 2009.
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID	51168	Region 9
Sandia Creek		

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Simazine.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Four samples exceeded the Water Quality Criteria for Simazine and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 51168, Simazine	Region 9
Sandia Creek	

LOE ID:	76416
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the samples exceeded the water quality objective for simazine.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The MCL for Simazine is 4 ug/L.
Guideline Reference:	
Spatial Representation:	Four water samples were collected from single location.
Temporal Representation:	Samples were collected one time in 2008 (July), and three times in 2009 (February, April, and July).
Environmental Conditions:	
QAPP Information:	The Quality Assurance Project Plan (QAPP) has been submitted with the data but it does not have pesticide information.
QAPP Information Reference(s):	

DECISION ID	51167	Region 9
Sandia Creek		

Pollutant:	Specific Conductivity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Water Quality Objective for Specific Conductivity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exceeded the Water Quality Objective for Specific Conductivity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51167, Specific Conductivity

Region 9

Sandia Creek

LOE ID: 76417

Pollutant: Specific Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

51169

Region 9

Sandia Creek

Pollutant: Temperature, water
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 26 samples exceed the Water Quality Objective for Temperature, water.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 26 samples exceeded the Water Quality Objective for Temperature, water and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51169, Temperature, water

Region 9

Sandia Creek

LOE ID:	76426
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 25 samples exceed the evaluation guideline.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Å°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data were collected in Sandia Creek near Fallbrook.
Temporal Representation:	Samples were collected intermittently between November 2007 and July 2009.
Environmental Conditions:	
QAPP Information:	QUALITY ASSURANCE PROJECT PLAN FOR BIOLOGICAL AND SURFACE WATER SAMPLING: HYDROLOGICAL AND BIOLOGICAL SUPPORT TO LOWER SANTA MARGARITA RIVER WATERSHED MONITORING PROGRAM PREPARED FOR UNITED STATES BUREAU OF RECLAMATION SOUTHERN CALIFORNIA AREA OFFICE, TEMECULA (OCTOBER 11, 2007)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51169, Temperature, water

Region 9

Sandia Creek

LOE ID:	76425
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33864	Region 9
Sandia Creek		

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One out of Eight samples exceeded the Basin Plan water quality objective for thallium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One out of Eight samples exceeded the Basin Plan water quality objective for thallium and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33864, Thallium

Region 9

Sandia Creek

LOE ID:	76427
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of eight samples exceeded the maximum contamination level (MCL).
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The CTR value protective of human health for thallium is 1.7 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33864, Thallium

Region 9

Sandia Creek

LOE ID:	3084
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	51170	Region 9
Sandia Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exhibited water toxicity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51170, Toxicity	Region 9
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Sandia Creek

LOE ID:	76438
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 902S01097.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	37239	Region 9
Sandia Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Basin Plan water quality objective for turbidity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded Basin Plan water quality objectives for turbidity, and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37239, Turbidity

Region 9

Sandia Creek

LOE ID:	76439
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37239, Turbidity

Region 9

Sandia Creek

LOE ID:	3068
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Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Sandia Creek at Sandia Creek Rd, 0.5 to 1.0 miles above confluence.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33744	Region 9
Sandia Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating chemical concentrations with sediment toxicity to assess listing status.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant. One of 19 samples exceed the Water Quality Criteria and Zero of the One samples exceeded the Evaluation Guideline for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 19 samples exceed the Water Quality Criteria for zinc and this this sample size is insufficient to determine with the power and confidence of the listing policy the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33744, Zinc

Region 9

Sandia Creek

LOE ID:	76458
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33744, Zinc

Region 9

Sandia Creek

LOE ID:	76451
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33744, Zinc

Region 9

Sandia Creek

LOE ID:	3086
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sample location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33744, Zinc**Region 9****Sandia Creek**

LOE ID:	76449
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33744, Zinc**Region 9****Sandia Creek**

LOE ID:	76448
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33744, Zinc

Region 9

Sandia Creek

LOE ID:	76459
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of eight samples tested for total zinc exceeded the recommended criteria of 120 ug/L.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (expressed as a 4-day average concentration) for zinc to protect aquatic life in freshwater. The zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a hardness of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33744, Zinc

Region 9

Sandia Creek

LOE ID:	76450
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected 5/13/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33744, Zinc

Region 9

Sandia Creek

LOE ID:	3085
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
One sample was collected on 06/09/1998.

Data used in 2002 assessment.

DECISION ID	43710	Region 9
Sandia Creek		

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 40 samples exceed the Basin Plan water quality objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 40 samples exceed the Basin Plan water quality objective for pH and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43710, pH	Region 9
Sandia Creek	

LOE ID: 3090

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5(minimum) and 8.5(maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000. Samples were collected once per sampling day, except for 03/07/2000 and 06/01/2000, on which 2 samples were collected per day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43710, pH

Region 9

Sandia Creek

LOE ID:	76393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43710, pH

Region 9

Sandia Creek

LOE ID:	76401
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Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 25 averages of pH had 3 exceedences.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook.
Temporal Representation:	Samples were collected twice a month from November 2007 to July 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

DECISION ID	48227	Region 9
Sandia Creek		

Pollutant:	Ammonia (Unionized)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Twelve of the 27 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 27 samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48227, Ammonia (Unionized)

Region 9

Sandia Creek

LOE ID:	76369
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Fish Spawning
Number of Samples:	27
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	US Bureau of Reclamation data from the Marine Corps Military Base at Camp Pendleton. Twelve out of 27 samples exceeded the criteria from the Basin Plan.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Regional Water Quality Control Board Basin Plan the discharge of wastes shall not cause concentrations of un-ionized ammonia (NH ₃) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sandia Creek near Fallbrook at USGS gage #11044350 (33.424444,-117.248333)
Temporal Representation:	Samples were taken from Nov 2007 to May 2010.
Environmental Conditions:	
QAPP Information:	Quality Assurance Project Plan for Biological and Surface Water Sampling -- Hydrologic and Biological Support for Lower Santa Margarita Watershed Program. Prepared for the United States Bureau of Reclamation by Stetson Engineering Inc. Oct. 2007 tr50
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48227, Ammonia (Unionized)

Region 9

Sandia Creek

LOE ID:	76370
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	US Bureau of Reclamation data from the Marine Corps Military Base at Camp Pendleton. Twelve out of 27 samples exceeded the criteria from the Basin Plan.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Regional Water Quality Control Board Basin Plan the discharge of wastes shall not cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sandia Creek near Fallbrook at USGS gage #11044350 (33.424444,-117.248333)
Temporal Representation:	Samples were taken from Nov 2007 to May 2010.
Environmental Conditions:	
QAPP Information:	Quality Assurance Project Plan for Biological and Surface Water Sampling -- Hydrologic and Biological Support for Lower Santa Margarita Watershed Program. Prepared for the United States Bureau of Reclamation by Stetson Engineering Inc. Oct. 2007 tr50
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48227, Ammonia (Unionized)

Region 9

Sandia Creek

LOE ID:	76376
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	US Bureau of Reclamation data from the Marine Corps Military Base at Camp Pendleton. Twelve out of 27 samples exceeded the criteria.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Regional Water Quality Control Board Basin Plan the discharge of wastes shall not cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sandia Creek near Fallbrook at USGS gage #11044350 (33.424444,-117.248333)
Temporal Representation:	Samples were taken from Nov 2007 to May 2010.
Environmental Conditions:	
QAPP Information:	Quality Assurance Project Plan for Biological and Surface Water Sampling -- Hydrologic and Biological Support for Lower Santa Margarita Watershed Program. Prepared for the United States Bureau of Reclamation by Stetson Engineering Inc. Oct. 2007 tr50
QAPP Information Reference(s):	

DECISION ID

37708

Region 9

Sandia Creek

Pollutant: Manganese
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 16 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 16 samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37708, Manganese

Region 9

Sandia Creek

LOE ID: 3093

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 11
Number of Exceedances: 2

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by LAW Crandall from 1997 to 2000. Two of 11 samples were in exceedance. The criteria was exceeded more than 10% of the time during 2 years.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The water quality objective for manganese in Sandia Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation: Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37708, Manganese

Region 9

Sandia Creek

LOE ID: 76335

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation: Data was collected on a single day 5/11/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 37708, Manganese

Region 9

Sandia Creek

LOE ID: 76342

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37708, Manganese

Region 9

Sandia Creek

LOE ID:	76343
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Sandia Creek within the Santa Margarita Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37708, Manganese

Region 9

Sandia Creek

LOE ID:	76344
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Manganese.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Sandia Creek and Santa Margarita River, 2004-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 5/14/2008-11/28/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report.

DECISION ID	43855	Region 9
Sandia Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Data from 1997 to 2000 show that two of four samples exceed the water quality objective for the prevention of biostimulatory substance of a N to P ratio of 10:1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section</p>

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 1997 to 2000 show that two of four samples exceed the water quality objective for the prevention of biostimulatory substance of a N to P ratio of 10:1 and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76349
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76348
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Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76341
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

Objective/Criterion Reference:	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia ? Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76379
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected on a single day 5/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76377
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76378
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Sandia Creek and Santa Margarita River, 2004-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected over the time period 2/24/2008-11/28/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report.

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	3092
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Although 6 samples were collected, only 4 samples were collected on the same day as phosphorus samples. From this data set, water quality was assessed using the N:P ratio from the 4 days on which both N and P samples were collected. Two of the 4 ratios were in exceedance of the 10:1 ratio.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact sampling location was not reported.
Temporal Representation:	Samples were collected 1-2 times per year from 12/1997 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76368
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]
Temporal Representation:	Data was collected on a single day 5/14/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID:	76367
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 43855, Nitrogen

Region 9

Sandia Creek

LOE ID: 76350

Pollutant: Nitrogen, ammonia (Total Ammonia)
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Creek @ Sandia Creek Drive (USGS gauging station) - 902SMG07]

Temporal Representation: Data was collected on a single day 5/13/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

37554

Region 9

Sandia Creek

Pollutant: Selenium
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of the Nine samples exceed the Water Quality Criteria for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the Nine samples exceeded the Water Quality Criteria for selenium and this does exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37554, Selenium**Region 9****Sandia Creek**

LOE ID:	76405
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of eight samples tested for total selenium exceeded the criteria of 5 ug/L.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (expressed as a 4-day average concentration) for selenium to protect aquatic life in freshwater. The criteria for selenium is 5 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	

Line of Evidence (LOE) for Decision ID 37554, Selenium

Region 9

Sandia Creek

LOE ID:	76403
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.05 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37554, Selenium

Region 9

Sandia Creek

LOE ID:	3082
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for selenium

Objective/Criterion Reference: is 0.05 mg/L.
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
 Temporal Representation: One sample was collected on 06/09/1998.
 Environmental Conditions:
 QAPP Information: Data used in 2002 assessment.
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37554, Selenium

Region 9

Sandia Creek

LOE ID: 76402

Pollutant: Selenium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
 Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
 Temporal Representation: Data was collected on a single day 5/11/2009.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 43122

Region 9

Sandia Creek

Pollutant: Silver
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Two of the nine samples exceed the Water Quality Criteria for Silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of nine samples exceed the criteria for silver and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43122, Silver Sandia Creek

Region 9

LOE ID:	3083
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Sandia Creek at Sandia Creek Rd., 0.5-1.0 mile above confluence.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43122, Silver

Region 9

Sandia Creek

LOE ID:	76415
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the eight samples tested for dissolved silver exceeded the numeric criteria promulgated to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in the Santa Margarita River Watershed, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Sandia Creek near Fallbrook at 33.424444 / -117.24833, in the Santa Margarita River Watershed.
Temporal Representation:	Samples were collected in 2008 during the months of January, April, July and October and in 2009 during the months of February, April and July.
Environmental Conditions:	
QAPP Information:	Marine Corps Base Camp Pendleton - Sandia Creek
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43122, Silver

Region 9

Sandia Creek

LOE ID:	76407
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43122, Silver

Region 9

Sandia Creek

LOE ID:	76406
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sandia Creek was collected at 1 monitoring site [Sandia Canyon Creek ~1.9mi above De Anza Rd. - 902S01097]
Temporal Representation:	Data was collected on a single day 5/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

37507

Region 9

Sandia Creek

Pollutant: Boron

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for boron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 11 samples exceed the Basin Plan water quality objective for boron and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37507, Boron

Region 9

Sandia Creek

LOE ID:	3098
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Boron is 0.75 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	38011	Region 9
Sandia Creek		

Pollutant:	Cyanide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan water quality objective for cyanide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Basin Plan water quality objective for cyanide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38011, Cyanide	Region 9
Sandia Creek	

LOE ID:	3096
Pollutant:	Cyanide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997-2000. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cyanide is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation:	Samples were collected 1-2 times per year from 12/1997 to 03/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33805	Region 9
Sandia Creek		

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for flouride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 11 samples exceed the Basin Plan water quality objective for flouride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33805, Fluoride	Region 9
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Sandia Creek

LOE ID:	3095
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33727	Region 9
Sandia Creek		

Pollutant:	Oil and Grease
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. This conclusion is based on the fact that the data shows none out of 14 samples had "detectable levels" of oil and grease. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This conclusion is based on the fact that the data shows none out of 14 samples had "detectable levels" of oil and grease and this information is insufficient to determine with the confidence and power required by the Listing Policy. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2 and a numeric water quality objective.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33727, Oil and Grease

Region 9

Sandia Creek

LOE ID:	3091
Pollutant:	Oil and Grease
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 14 samples were in exceedance. All samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33726

Region 9

Sandia Creek

Pollutant:	Phosphorus
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the 6 samples exceeds the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 6 samples exceeds the Basin Plan water quality objective for phosphorus and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33726, Phosphorus
Sandia Creek

Region 9

LOE ID: 3089

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by LAW Crandall from 1997 to 1999. One of 6 samples was in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters - streams and other flowing waters and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at Sandia Creek. Exact sample location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 5/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	44288	Region 9
Sandia Creek		

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 10 samples exceed the Basin Plan water quality objective for surfactants.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 10 samples exceed the Basin Plan water quality objective for surfactants and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44288, Surfactants (MBAS)	Region 9
Sandia Creek	

LOE ID:	3087
Pollutant:	Surfactants (MBAS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 10 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for MBAS is 0.5 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sandia Creek. Exact location was not reported.
Temporal Representation:	Samples were collected on a quarterly basis from 12/1997 to 06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Santa Margarita River \(Upper\)](#)
Water Body ID: CAR9022200020011001141050
Water Body Type: River & Stream

DECISION ID	37431	Region 9
Santa Margarita River (Upper)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 4.2 and 4.6 of the Listing Policy. Under section 4.1 a single line of evidence is necessary, and under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two samples (sediment) and five of Eleven samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples (sediment) and five of Eleven samples (water) exceeded the water quality objective and this exceeds the frequency listed in table 4.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37431, Toxicity	Region 9
Santa Margarita River (Upper)	

LOE ID:	30288
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Two samples were collected at Santa Margarita 1 station 902SSMR1 from January to September 2003, they showed significant toxicity levels (SL) in the following test: Hyalella azteca. No toxicity was observed.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	One sampling site was used in this line of evidence. Santa Margarita 1 (902SSMR1 lat/long: 33.47404/-117.14148).
Temporal Representation:	Samples were collected on the following dates: January 15, April 16, May 14, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37431, Toxicity
Santa Margarita River (Upper)**

Region 9

LOE ID:	24978
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- Six samples were collected and none showed significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test. Ceriodaphnia dubia- Six samples were collected and two samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive. Hyalella azteca- Six samples were collected and one sample show significant toxicity levels (SL) as determined by the Hyalella azteca growth/survival test. Samples were collected November 2001 through February 2006.

Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report San Diego Stormwater Copermittees Jurisdiction Urban Runoff Managment Program. Final Report. Baseline Long Term Effectiveness Assessment
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (U.S. EPA, 2002).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring stations Santa Margarita 1 located on the main stem of the Santa Margarita River.
Temporal Representation:	Samples were collected on the following dates: January 14-15, April 15-16, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37431, Toxicity
Santa Margarita River (Upper)**

Region 9

LOE ID:	76503
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	

Spatial Representation:	The sample was collected at station 902S00565.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37431, Toxicity
Santa Margarita River (Upper)**

Region 9

LOE ID:	21402
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Santa Margarita 1 station 902SSMR1 from January to September 2003, they showed significant toxicity levels (SL) in the following test: Selenastrum algae growth test - Two of the four samples.
Data Reference:	Ceriodaphnia dubia survival and reproduction. No toxicity was observed. Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	One sampling site was used in this line of evidence. Santa Margarita 1 (902SSMR1 lat/long: 33.47404/-117.14148).
Temporal Representation:	Samples were collected on the following dates: January 15, April 16, May 14, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 47930

Region 9

Santa Margarita River (Upper)

Pollutant:	Alkalinity as CaCO3
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47930, Alkalinity as CaCO₃**Region 9****Santa Margarita River (Upper)**

LOE ID:	76564
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:	Data was collected over the time period 4/27/2009-5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47930, Alkalinity as CaCO₃
Santa Margarita River (Upper)

Region 9

LOE ID:	76565
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected over the time period 4/27/2009-5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 44289

Region 9

Santa Margarita River (Upper)

Pollutant:	Alkalinity as CaCO₃ Ammonia Manganese Nickel Orthophosphate Total Kjeldahl Nitrogen (TKN) Total Suspended Solids (TSS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	These pollutants are being considered for placement on the section 303(d) list under sections 3.1 and 3.2 of the Listing Policy. Under sections 3.1 and 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objectives for these multiple pollutants.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceed the water quality objectives for these multiple pollutants and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 44289, Multiple Pollutants
Santa Margarita River (Upper)**

Region 9

LOE ID:	26402
Pollutant:	Alkalinity as CaCO ₃ Ammonia Manganese Nickel Orthophosphate Total Kjeldahl Nitrogen (TKN) Total Suspended Solids (TSS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	37 samples were collected at Santa Margarita Creek station 902SMSMR1 during the months of January 2003, April 2003, May 2003, and September 2003, for conventional inorganics analyses. None of the 37 samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Alkalinity as CaCO ₃ 20 mg/l, ammonia as N 0.025 mg/l, nitrite as N 1.mg/l, nitrogen total Kjeldahl (If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used), ortho phosphate as P total 0.05 mg/l, sulfate 250 mg/l, total suspended solids narrative: Waters shall not contain suspended solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Santa Margarita Creek station 902SMSMR1; (Latitude 33.4741, Longitude -117.1414).
Temporal Representation:	Water samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	47571	Region 9
Santa Margarita River (Upper)		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47571, Aluminum	Region 9
Santa Margarita River (Upper)	

LOE ID:	76566
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47571, Aluminum
Santa Margarita River (Upper)

Region 9

LOE ID:	76569
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47571, Aluminum
Santa Margarita River (Upper)

Region 9

LOE ID:	76570
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Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47574	Region 9
Santa Margarita River (Upper)		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceed the water quality objective and this sample size is insufficient to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47574, Antimony
Santa Margarita River (Upper)**

Region 9

LOE ID:	77890
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for antimony is .006 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID 47613
Santa Margarita River (Upper)**

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of two samples (water) exceeded the water quality objectives.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of two samples (water) exceeded the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47613, Arsenic
Santa Margarita River (Upper)**

Region 9

LOE ID:	76578
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:

Data was collected on a single day 5/6/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47613, Arsenic

Region 9

Santa Margarita River (Upper)

LOE ID: 76575

Pollutant: Arsenic

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 4/27/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47613, Arsenic

Region 9

Santa Margarita River (Upper)

LOE ID: 76576

Pollutant: Arsenic

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47613, Arsenic

Region 9

Santa Margarita River (Upper)

LOE ID:	76577
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47613, Arsenic
Santa Margarita River (Upper)

Region 9

LOE ID:	77897
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47613, Arsenic
Santa Margarita River (Upper)

Region 9

LOE ID:	77898
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47613, Arsenic
Santa Margarita River (Upper)

Region 9

LOE ID:	76579
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51181	Region 9
Santa Margarita River (Upper)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, additional data and information is available indicating that standards are being met.

Samples were collected at two sites, with two out of twelve samples exhibiting degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index during a 5 year period. More recent data from the Stormwater Monitoring Condition was not included in this listing cycle but confirms the more recent results that there is not significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects	Region 9
Santa Margarita River (Upper)	

LOE ID:	76501
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 750 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects

Region 9

Santa Margarita River (Upper)

LOE ID:	21402
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Santa Margarita 1 station 902SSMR1 from January to September 2003, they showed significant toxicity levels (SL) in the following test: Selenastrum algae growth test - Two of the four samples.
Data Reference:	Ceriodaphnia dubia survival and reproduction. No toxicity was observed. Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Monitoring data for Region 9](#)

Spatial Representation: One sampling site was used in this line of evidence. Santa Margarita 1 (902SSMR1 lat/long: 33.47404/-117.14148).

Temporal Representation: Samples were collected on the following dates: January 15, April 16, May 14, and September 9, 2003.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects
Santa Margarita River (Upper)

Region 9

LOE ID: 21194

Pollutant: Total Nitrogen as N
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
 Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
 Data Used to Assess Water Quality: Two of the four samples collected at Santa Margarita River on January 2003, April 2003, May 2003, and September 2003 show excessive nitrogen concentrations. (SWAMP, 2007).

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
 Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: One sampling site was used in this line of evidence. Santa Margarita 1 (902SSMR1 lat/long: 33.47404/-117.14148).

Temporal Representation: Samples were collected on January 2003, April 2003, May 2003, and September 2003.

Environmental Conditions: The first two sampling events occurred between storm events and high base flow respectively. The third and fourth occurred during declining and minimum base flow respectively.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects
Santa Margarita River (Upper)

Region 9

LOE ID: 72789

Pollutant: Benthic-Macroinvertebrate Bioassessments
 LOE Subgroup: Population/Community Degradation

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score for this site was 13.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected from Santa Margarita River (Upper).
Temporal Representation:	The sample was collected in April 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects
Santa Margarita River (Upper)

Region 9

LOE ID:	24978
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- Six samples were collected and none showed significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test.
	Ceriodaphnia dubia- Six samples were collected and two samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive.
	Hyalella azteca- Six samples were collected and one sample show significant toxicity levels (SL) as

Data Reference:	determined by the Hyalella azteca growth/survival test. Samples were collected November 2001 through February 2006. Urban Runoff Monitoring. Volume 1- Final Report San Diego Stormwater Copermittees Jurisdiction Urban Runoff Managment Program. Final Report. Baseline Long Term Effectiveness Assessment
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (U.S. EPA, 2002).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring stations Santa Margarita 1 located on the main stem of the Santa Margarita River.
Temporal Representation:	Samples were collected on the following dates: January 14-15, April 15-16, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects

Region 9

Santa Margarita River (Upper)

LOE ID:	7407
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceeded the total phosphorus water quality objective. Samples were collected between January 2003 and September 2003 for the SWAMP program.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One sampling site was used in this line of evidence. Santa Margarita 1 (902SMSMR1 lat/long: 33.47404/-117.14148).
Temporal Representation:	Samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	The first two sampling events occurred between storm events and high base flow

respectively. The third and fourth occurred during declining and minimum base flow respectively.

QAPP Information: Puckett, M. 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program ("SWAMP"). California Department of Fish and Game, Monterey, CA.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects

Region 9

Santa Margarita River (Upper)

LOE ID: 80832

Pollutant: Benthic-Macroinvertebrate Bioassessments
 LOE Subgroup: Population/Community Degradation
 Matrix: Water
 Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 12
 Number of Exceedances: 2

Data and Information Type: Benthic macroinvertebrate surveys
 Data Used to Assess Water Quality: Twelve samples were taken at three stations in the Santa Margarita River above De Luz Creek. Two samples had CSCI scores below the 0.79 threshold, therefore exceeding the water quality objective for the aquatic life beneficial use.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference: [The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation: The samples were collected at the following stations: 902SMR-TWAS-1, 902S00565, and 902SMR-WGR

Temporal Representation: The samples were collected from 2003 to 2007.

Environmental Conditions:

QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project and the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)
[Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects
Santa Margarita River (Upper)

Region 9

LOE ID:	76583
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Ten of the eleven samples collected had IBI scores below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 902SMR-MLS-2, SMR-SC, and SMR-WGR Santa Margarita River.
Temporal Representation:	The samples were collected twice a year in May and October from 2002 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects
Santa Margarita River (Upper)

Region 9

LOE ID:	76507
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects

Region 9

Santa Margarita River (Upper)

LOE ID:	77900
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response. Administrative Report 00-6

Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 51181, Benthic Community Effects
Santa Margarita River (Upper)

Region 9

LOE ID:	77885
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47614

Region 9

Santa Margarita River (Upper)

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the two samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47614, Bifenthrin

Region 9

Santa Margarita River (Upper)

LOE ID:	77900
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall

Objective/Criterion Reference:	not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response. Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47614, Bifenthrin

Region 9

Santa Margarita River (Upper)

LOE ID:	76585
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Santa Margarita River (Upper)

LOE ID:	76584
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID**47616****Region 9****Santa Margarita River (Upper)**

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47616, Cadmium
Santa Margarita River (Upper)**

Region 9

LOE ID:	76592
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47616, Cadmium
Santa Margarita River (Upper)**

Region 9

LOE ID:	76593
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47616, Cadmium

Region 9

Santa Margarita River (Upper)

LOE ID:	77902
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation: Data was collected on a single day 12/16/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47616, Cadmium	Region 9
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LOE ID:	76600
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation: Data was collected on a single day 5/6/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47616, Cadmium	Region 9
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LOE ID:	76599
Pollutant:	Cadmium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47616, Cadmium
Santa Margarita River (Upper)

Region 9

LOE ID:	76606
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47616, Cadmium

Region 9

Santa Margarita River (Upper)

LOE ID:	76603
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road), Santa Margarita River @ SDSU Ecological Reserve Entrance]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47616, Cadmium
Santa Margarita River (Upper)

Region 9

LOE ID:	76602
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47616, Cadmium
Santa Margarita River (Upper)

Region 9

LOE ID:	76601
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47618	Region 9
Santa Margarita River (Upper)		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47618, Chloride	Region 9
Santa Margarita River (Upper)	

LOE ID:	76610
Pollutant:	Chloride

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47618, Chloride
Santa Margarita River (Upper)

Region 9

LOE ID:	76608
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47618, Chloride
Santa Margarita River (Upper)

Region 9

LOE ID:	76607
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47620

Region 9

Santa Margarita River (Upper)

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47620, Chlorpyrifos
Santa Margarita River (Upper)**

Region 9

LOE ID:	76616
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47620, Chlorpyrifos
Santa Margarita River (Upper)

Region 9

LOE ID:	77913
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance (902SMG09), Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road, 902SMG10)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47620, Chlorpyrifos
Santa Margarita River (Upper)

Region 9

LOE ID:	77909
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47620, Chlorpyrifos
Santa Margarita River (Upper)

Region 9

LOE ID:	77910
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.

Guideline Reference:

[2011 Edition of the Drinking Water Standards and Health Advisories](#)

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]

Temporal Representation:

Data was collected on a single day 12/16/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	47621	Region 9
Santa Margarita River (Upper)		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of 3 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 3 samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47621, Chromium	Region 9
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Santa Margarita River (Upper)

LOE ID:	76485
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47621, Chromium

Region 9

Santa Margarita River (Upper)

LOE ID:	76623
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47621, Chromium

Region 9

Santa Margarita River (Upper)

LOE ID:	76486
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47621, Chromium

Region 9

Santa Margarita River (Upper)

LOE ID:	76625
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47621, Chromium
Santa Margarita River (Upper)

Region 9

LOE ID:	76626
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47621, Chromium

Region 9

Santa Margarita River (Upper)

LOE ID:	76624
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47629	Region 9
Santa Margarita River (Upper)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of 16 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 16 samples (water) exceeded the water quality objective and this sample size is sufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 47629, Copper	Region 9
Santa Margarita River (Upper)	

LOE ID:	76547
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47629, Copper

Region 9

Santa Margarita River (Upper)

LOE ID:	76490
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47629, Copper

Region 9

Santa Margarita River (Upper)

LOE ID: 76489

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47629, Copper

Region 9

Santa Margarita River (Upper)

LOE ID: 76488

Pollutant: Copper
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47629, Copper

Region 9

Santa Margarita River (Upper)

LOE ID:	76487
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47629, Copper
Santa Margarita River (Upper)

Region 9

LOE ID:	77880
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47629, Copper
Santa Margarita River (Upper)

Region 9

LOE ID:	76536
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples

Data Reference:	exceed the criterion for Copper. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road), Santa Margarita River @ SDSU Ecological Reserve Entrance]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47629, Copper

Region 9

Santa Margarita River (Upper)

LOE ID:	76537
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road), Santa Margarita River @ SDSU Ecological Reserve Entrance]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47629, Copper
Santa Margarita River (Upper)

Region 9

LOE ID: 76535

Pollutant: Copper
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 47578
Santa Margarita River (Upper)

Region 9

Pollutant: Cyfluthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one

sample exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47578, Cyfluthrin
Santa Margarita River (Upper)**

Region 9

LOE ID:	76549
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

Line of Evidence (LOE) for Decision ID 47578, Cyfluthrin**Region 9****Santa Margarita River (Upper)**

LOE ID:	76548
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID**47630****Region 9****Santa Margarita River (Upper)**

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47630, Cyhalothrin, Lambda
Santa Margarita River (Upper)**

Region 9

LOE ID:	76550
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47630, Cyhalothrin, Lambda
Santa Margarita River (Upper)**

Region 9

LOE ID:	76557
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47631	Region 9
Santa Margarita River (Upper)		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the two samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47631, Cypermethrin
Santa Margarita River (Upper)**

Region 9

LOE ID:	76558
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47631, Cypermethrin
Santa Margarita River (Upper)**

Region 9

LOE ID:	76559
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47631, Cypermethrin

Region 9

Santa Margarita River (Upper)

LOE ID:	77885
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San

Objective/Criterion Reference:	Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 47644 Region 9	
Santa Margarita River (Upper)	
Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47644, Deltamethrin Region 9	
Santa Margarita River (Upper)	
LOE ID:	76567

Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47644, Deltamethrin
Santa Margarita River (Upper)

Region 9

LOE ID:	76568
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47644, Deltamethrin
Santa Margarita River (Upper)

Region 9

LOE ID:	77888
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID **47645**
Santa Margarita River (Upper)

Region 9

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47645, Diazinon		Region 9
Santa Margarita River (Upper)		
LOE ID:	77893	
Pollutant:	Diazinon	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	8	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	

Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47645, Diazinon

Region 9

Santa Margarita River (Upper)

LOE ID:	77891
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47645, Diazinon
Santa Margarita River (Upper)

Region 9

LOE ID:	77892
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47645, Diazinon
Santa Margarita River (Upper)

Region 9

LOE ID:	76573
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47646	Region 9
Santa Margarita River (Upper)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47646, Esfenvalerate/Fenvalerate
Santa Margarita River (Upper)**

Region 9

LOE ID:	76580
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47646, Esfenvalerate/Fenvalerate
Santa Margarita River (Upper)**

Region 9

LOE ID:	77896
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples

Data Reference:	<p>exceed the criterion for Esfenvalerate.</p> <p>Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47646, Esfenvalerate/Fenvalerate
Santa Margarita River (Upper)

Region 9

LOE ID:	76581
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47661	Region 9
Santa Margarita River (Upper)		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47661, Fenpropathrin	Region 9
Santa Margarita River (Upper)	

LOE ID:	76587
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47661, Fenpropathrin
Santa Margarita River (Upper)

Region 9

LOE ID:	76586
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47659

Region 9

Santa Margarita River (Upper)

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47659, Lead Santa Margarita River (Upper)

Region 9

LOE ID:	76594
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47659, Lead
Santa Margarita River (Upper)**

Region 9

LOE ID:	76595
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47659, Lead
Santa Margarita River (Upper)**

Region 9

LOE ID:	76596
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Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47659, Lead
Santa Margarita River (Upper)

Region 9

LOE ID:	76605
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness

Objective/Criterion Reference:	dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47659, Lead
Santa Margarita River (Upper)

Region 9

LOE ID:	76598
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road), Santa Margarita River @ SDSU Ecological Reserve Entrance]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 47659, Lead
Santa Margarita River (Upper)**

Region 9

LOE ID:	76604
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 47659, Lead
Santa Margarita River (Upper)**

Region 9

LOE ID:	76597
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 47664		Region 9
Santa Margarita River (Upper)		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the Eight samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 47664, Malathion		Region 9
Santa Margarita River (Upper)		

LOE ID:	76611
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47664, Malathion
Santa Margarita River (Upper)

Region 9

LOE ID:	77903
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) archived advisory level criteria for malathion in drinking water is 160.0 ug/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47664, Malathion
Santa Margarita River (Upper)

Region 9

LOE ID:	77907
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]

Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47664, Malathion	Region 9
Santa Margarita River (Upper)	

LOE ID:	77904
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) archived advisory level criteria for malathion in drinking water is 160.0 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/10/2006-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	38589	Region 9
Santa Margarita River (Upper)		

Pollutant:	Metals
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objectives for the multiple metal pollutants.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the water quality objectives for the multiple metal pollutants and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 38589, Metals Santa Margarita River (Upper)

Region 9

LOE ID:	26399
Pollutant:	Metals
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	Highest quality fixed-station P/C (conventional plus toxicants)
Data Used to Assess Water Quality:	Fourty-four samples were collected at Santa Margarita Creek station 902SMSMR1 during the months of January 2003, April 2003, May 2003, and September 2003, for metals analyses. None of the 44 samples show excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level (MCL) for aluminum is 1. mg /l (ppb). Water Quality Control for the San Diego Basin. 2007. The dissolved chronic criterion for the following metals applies: arsenic 150 Åµg/l (ppb), cadmium 2.2 Åµg/l (ppb), copper 9.0 Åµg/l (ppb), selenium 5.0 Åµg/l (ppb), zinc 120 Åµg/l (ppb), chromium 11 Åµg/l (ppb), manganese 0.05 mg/l, nickel 52 Åµg/l (ppb), lead 2.5 Åµg/l (ppb), and silver 3.4Åµg/l (ppb). California Toxics Rule. 2007.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Santa Margarita Creek station 902SMSMR1; (Latitude 33.4741, Longitude -117.1414).

Temporal Representation:	Water samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	47673	Region 9
Santa Margarita River (Upper)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of One sample (sediment) and zero of Two samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of Two samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47673, Nickel	Region 9
Santa Margarita River (Upper)	

LOE ID:	77859
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47673, Nickel

Region 9

Santa Margarita River (Upper)

LOE ID:	76618
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47673, Nickel

Region 9

Santa Margarita River (Upper)

LOE ID:	76619
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47673, Nickel

Region 9

Santa Margarita River (Upper)

LOE ID:	76620
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47673, Nickel

Region 9

Santa Margarita River (Upper)

LOE ID:	76621
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47673, Nickel
Santa Margarita River (Upper)**

Region 9

LOE ID:	76491
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 47673, Nickel
Santa Margarita River (Upper)**

Region 9

LOE ID:	76617
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47677	Region 9
Santa Margarita River (Upper)		
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47677, Nitrate/Nitrite (Nitrite + Nitrate as N)**Region 9****Santa Margarita River (Upper)**

LOE ID:	76493
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River @ SDSU Ecological Reserve Entrance]
Temporal Representation:	Data was collected over the time period 5/13/2003-9/4/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47677, Nitrate/Nitrite (Nitrite + Nitrate as N)**Region 9****Santa Margarita River (Upper)**

LOE ID:	77861
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47677, Nitrate/Nitrite (Nitrite + Nitrate as N)
Santa Margarita River (Upper)

Region 9

LOE ID:	76492
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47679
Santa Margarita River (Upper)

Region 9

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Ten samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the Ten samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47679, Nitrogen, Nitrite	Region 9
Santa Margarita River (Upper)	

LOE ID:	76496
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:

Data was collected on a single day 5/6/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47679, Nitrogen, Nitrite

Region 9

Santa Margarita River (Upper)

LOE ID: 76495

Pollutant: Nitrogen, Nitrite

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]

Temporal Representation:

Data was collected over the time period 5/12/2003-9/5/2003.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47679, Nitrogen, Nitrite

Region 9

Santa Margarita River (Upper)

LOE ID: 77866

Pollutant: Nitrogen, Nitrite

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 47679, Nitrogen, Nitrite
Santa Margarita River (Upper)**

Region 9

LOE ID:	76497
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Sandia Creek and Santa Margarita River, 2004-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River upstream of Stone Creek - 902SMRGorge]
Temporal Representation:	Data was collected over the time period 12/6/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report.

DECISION ID	47682	Region 9
Santa Margarita River (Upper)		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47682, Nitrogen, ammonia (Total Ammonia)	Region 9
Santa Margarita River (Upper)	

LOE ID:	76571
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47682, Nitrogen, ammonia (Total Ammonia)

Region 9

Santa Margarita River (Upper)

LOE ID:	76572
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]

Data was collected over the time period 5/12/2003-9/4/2003.

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47931	Region 9
Santa Margarita River (Upper)		

Pollutant: Oxygen, Dissolved
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceeds the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47931, Oxygen, Dissolved	Region 9
Santa Margarita River (Upper)	

LOE ID: 76498
Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47931, Oxygen, Dissolved
Santa Margarita River (Upper)

Region 9

LOE ID:	76499
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47687	Region 9
Santa Margarita River (Upper)		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47687, Permethrin, total	Region 9
Santa Margarita River (Upper)	

LOE ID:	76507
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47687, Permethrin, total
Santa Margarita River (Upper)**

Region 9

LOE ID:	76506
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47698

Region 9

Santa Margarita River (Upper)

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47698, Selenium Santa Margarita River (Upper)

Region 9

LOE ID:	77872
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]

Temporal Representation:

Data was collected on a single day 12/16/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47698, Selenium

Region 9

Santa Margarita River (Upper)

LOE ID: 77871

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Maximum Contaminant Level for selenium in the Basin Plan is 0.05 mg/L (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]

Temporal Representation:

Data was collected on a single day 12/16/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47698, Selenium

Region 9

Santa Margarita River (Upper)

LOE ID: 76510

Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47698, Selenium

Region 9

Santa Margarita River (Upper)

LOE ID:	76512
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:

Data was collected on a single day 5/6/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47698, Selenium

Region 9

Santa Margarita River (Upper)

LOE ID: 76511

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Maximum Contaminant Level for selenium in the Basin Plan is 0.05 mg/L.

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:

Data was collected on a single day 5/6/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 47702

Region 9

Santa Margarita River (Upper)

Pollutant: Silver

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two

samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47702, Silver
Santa Margarita River (Upper)**

Region 9

LOE ID:	76519
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47702, Silver

Region 9

Santa Margarita River (Upper)

LOE ID:	76517
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47702, Silver**Region 9****Santa Margarita River (Upper)**

LOE ID:	76518
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness

dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47933	Region 9
Santa Margarita River (Upper)		

Pollutant: Specific Conductivity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47933, Specific Conductivity	Region 9
Santa Margarita River (Upper)	

LOE ID: 76525

Pollutant: Specific Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47710	Region 9
Santa Margarita River (Upper)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47710, Sulfates

Region 9

Santa Margarita River (Upper)

LOE ID:	76528
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47710, Sulfates

Region 9

Santa Margarita River (Upper)

LOE ID:	76526
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for

Data Reference:	Sulfate. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47710, Sulfates

Region 9

Santa Margarita River (Upper)

LOE ID:	76527
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47934

Region 9

Santa Margarita River (Upper)

Pollutant: Temperature, water
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47934, Temperature, water Santa Margarita River (Upper)

Region 9

LOE ID: 76529

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving

Objective/Criterion Reference:	water temperature. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47927	Region 9
Santa Margarita River (Upper)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. One of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47927, Total Dissolved Solids	Region 9
Santa Margarita River (Upper)	

LOE ID:	76501
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 750 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47927, Total Dissolved Solids

Region 9

Santa Margarita River (Upper)

LOE ID:	76500
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47935	Region 9
Santa Margarita River (Upper)		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. One of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47935, Turbidity	Region 9
Santa Margarita River (Upper)	

LOE ID:	76504
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 20 NTU.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 4/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47935, Turbidity

Region 9

Santa Margarita River (Upper)

LOE ID: 76505

Pollutant: Turbidity

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 20 NTU.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]

Temporal Representation: Data was collected on a single day 4/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

47711

Region 9

Santa Margarita River (Upper)

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 15 samples (water) exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47711, Zinc

Region 9

Santa Margarita River (Upper)

LOE ID: 76523

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47711, Zinc

Region 9

Santa Margarita River (Upper)

LOE ID:	76515
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47711, Zinc

Region 9

Santa Margarita River (Upper)

LOE ID:	76513
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47711, Zinc
Santa Margarita River (Upper)**

Region 9

LOE ID:	76516
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that

Objective/Criterion Reference:	adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations). Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road), Santa Margarita River @ SDSU Ecological Reserve Entrance]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47711, Zinc

Region 9

Santa Margarita River (Upper)

LOE ID:	76522
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road), Santa Margarita River @ SDSU Ecological Reserve Entrance]
Temporal Representation:	Data was collected over the time period 5/12/2003 - 5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47711, Zinc

Region 9

Santa Margarita River (Upper)

LOE ID:	76520
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47711, Zinc**Region 9****Santa Margarita River (Upper)**

LOE ID:	76514
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47711, Zinc

Region 9

Santa Margarita River (Upper)

LOE ID:	77869
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River - 902SMR-MLS-2]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was used.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47711, Zinc

Region 9

Santa Margarita River (Upper)

LOE ID:	76521
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47771

Region 9

Santa Margarita River (Upper)

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47771, pH
Santa Margarita River (Upper)**

Region 9

LOE ID:	76509
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47771, pH
Santa Margarita River (Upper)**

Region 9

LOE ID:	76508
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 4/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	50567	Region 9
Santa Margarita River (Upper)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the 14 samples exceed the Water Quality Objective for Enterococcus, Three out of 14 samples exceeded the Water Quality Objective for Fecal Coliform, and One out of 14 samples exceeded the Water Quality Objective for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 14 samples exceed the Water Quality Objective for Enterococcus, Three out of 14 samples exceeded the Water Quality Objective for Fecal Coliform, and One out of 14 samples exceeded the Water Quality Objective for Total Coliform and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50567, Indicator Bacteria

Region 9

Santa Margarita River (Upper)

LOE ID:	76582
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/12/2003-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50567, Indicator Bacteria

Region 9

Santa Margarita River (Upper)

LOE ID:	76574
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to

Data Reference:	determine beneficial use support and results are as follows: 7 of 14 samples exceed the criterion for Enterococci. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/12/2003-5/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50567, Indicator Bacteria

Santa Margarita River (Upper)

Region 9

LOE ID:	76530
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 2 monitoring sites [Santa Margarita River @ SDSU Ecological Reserve Entrance, Santa Margarita River @ Sandia Creek Drive (one-half mile east of De Luz Road)]
Temporal Representation:	Data was collected over the time period 5/12/2003-5/27/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47653	Region 9
Santa Margarita River (Upper)		

Pollutant: Iron

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 5 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 5 samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47653, Iron	Region 9
Santa Margarita River (Upper)	

LOE ID: 76590

Pollutant: Iron

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47653, Iron

Region 9

Santa Margarita River (Upper)

LOE ID:	76589
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47653, Iron

Region 9

Santa Margarita River (Upper)

LOE ID:	76588
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47653, Iron
Santa Margarita River (Upper)

Region 9

LOE ID:	76591
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Iron.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Sandia Creek and Santa Margarita River, 2004-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan, San Diego

Objective/Criterion Reference:	Basin). Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River upstream of Stone Creek - 902SMRGorge]
Temporal Representation:	Data was collected over the time period 12/6/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report.

DECISION ID	47668	Region 9
Santa Margarita River (Upper)		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Three of the six samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the six samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47668, Manganese	Region 9
Santa Margarita River (Upper)	

LOE ID:	76615
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Manganese.
Data Reference:	Data for Metals, Nutrients, and Inorganics from the County of San Diego Sandia Creek and Santa Margarita River, 2004-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River upstream of Stone Creek - 902SMRGorge]
Temporal Representation:	Data was collected over the time period 12/6/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and COSD Santa Margarita Mass Loading Report.

Line of Evidence (LOE) for Decision ID 47668, Manganese
Santa Margarita River (Upper)

Region 9

LOE ID:	76613
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47668, Manganese
Santa Margarita River (Upper)

Region 9

LOE ID:	76612
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47668, Manganese
Santa Margarita River (Upper)

Region 9

LOE ID:	76614
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Santa Margarita River (Upper) within the Santa Margarita Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita River (Upper) was collected at 1 monitoring site [Santa Margarita River ~0.3mi above Sandia Cr. Dr. - 902S00565]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	43136	Region 9
Santa Margarita River (Upper)		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Two of the four samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of four samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 43136, Nitrogen
Santa Margarita River (Upper)**

Region 9

LOE ID:	21194
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of the four samples collected at Santa Margarita River on January 2003, April 2003, May 2003, and September 2003 show excessive nitrogen concentrations. (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One sampling site was used in this line of evidence. Santa Margarita 1 (902SSMR1 lat/long: 33.47404/-117.14148).
Temporal Representation:	Samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	The first two sampling events occurred between storm events and high base flow respectively. The third and fourth occurred during declining and minimum base flow respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 34470

Region 9

Santa Margarita River (Upper)

Pollutant:	Phosphorus
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34470, Phosphorus
Santa Margarita River (Upper)**

Region 9

LOE ID:	7407
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceeded the total phosphorus water quality objective. Samples were collected between January 2003 and September 2003 for the SWAMP program.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	One sampling site was used in this line of evidence. Santa Margarita 1 (902SMSMR1 lat/long: 33.47404/-117.14148).
Temporal Representation:	Samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	The first two sampling events occurred between storm events and high base flow respectively. The third and fourth occurred during declining and minimum base flow respectively.
QAPP Information:	Puckett, M. 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program ("SWAMP"). California Department of Fish and Game, Monterey, CA.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 34470, Phosphorus
Santa Margarita River (Upper)**

Region 9

LOE ID:	4731
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34470, Phosphorus Santa Margarita River (Upper)

Region 9

LOE ID:	24978
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum capricornutum- Six samples were collected and none showed significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test.</p> <p>Ceriodaphnia dubia- Six samples were collected and two samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive.</p> <p>Hyalella azteca- Six samples were collected and one sample show significant toxicity levels (SL) as determined by the Hyalella azteca growth/survival test. Samples were collected November 2001 through February 2006.</p>
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report San Diego Stormwater Copermittees Jurisdiction Urban Runoff Managment Program. Final Report. Baseline Long Term Effectiveness Assessment
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (U.S. EPA, 2002).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring stations Santa Margarita 1 located on the main stem of the Santa Margarita River.
Temporal Representation:	Samples were collected on the following dates: January 14-15, April 15-16, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 34470, Phosphorus
Santa Margarita River (Upper)**

Region 9

LOE ID:	21402
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Santa Margarita 1 station 902SSMR1 from January to September 2003, they showed significant toxicity levels (SL) in the following test: Selenastrum algae growth test - Two of the four samples.
Data Reference:	Ceriodaphnia dubia survival and reproduction. No toxicity was observed. Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	One sampling site was used in this line of evidence. Santa Margarita 1 (902SSMR1 lat/long: 33.47404/-117.14148).
Temporal Representation:	Samples were collected on the following dates: January 15, April 16, May 14, and September 9, 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 34470, Phosphorus
Santa Margarita River (Upper)**

Region 9

LOE ID:	76503
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 902S00565.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	43135	Region 9
Santa Margarita River (Upper)		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 208 samples exceed the Basin Plan water quality objective for polycyclic aromatic hydrocarbons.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 208 samples exceed the Basin Plan water quality objective for polycyclic aromatic hydrocarbons and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43135, PAHs (Polycyclic Aromatic Hydrocarbons)
Santa Margarita River (Upper)**

Region 9

LOE ID:	26400
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	208
Number of Exceedances:	0
Data and Information Type:	Highest quality fixed-station P/C (conventional plus toxicants)
Data Used to Assess Water Quality:	208 samples were collected at Santa Margarita Creek station 902SMSMR1 during the months of January 2003, April 2003, May 2003, and September 2003, for PAHs analyses. None of the 208 samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCL 0.0002mg/l) specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Santa Margarita Creek station 902SMSMR1; (Latitude 33.4741, Longitude -117.1414).
Temporal Representation:	Water samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 208 samples exceed the Basin Plan water quality objective for polychlorinated biphenyls.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 208 samples exceed the Basin Plan water quality objective for polychlorinated biphenyls and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 44273, PCBs (Polychlorinated biphenyls)	Region 9
Santa Margarita River (Upper)	

LOE ID:	26401
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	208
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	208 samples were collected at Santa Margarita Creek station 902SMSMR1 during the months of January 2003, April 2003, May 2003, and September 2003, for PCBs analyses. None of the 208 samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan; waters designated for use as domestic or municipal supply (MUN)

shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCL 0.5 mg/l) specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Water samples were collected at Santa Margarita Creek station 902SMSMR1; (Latitude 33.4741, Longitude -117.1414).

Temporal Representation:

Water samples were collected on January 2003, April 2003, May 2003, and September 2003.

Environmental Conditions:

QAPP Information:

Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Murrieta Creek](#)
Water Body ID: CAR9023200020010924152136
Water Body Type: River & Stream

DECISION ID	33387	Region 9
Murrieta Creek		

Pollutant: Phosphorus
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. One-hundred and five of 167 samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One-hundred and five of 167 samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33387, Phosphorus	Region 9
Murrieta Creek	

LOE ID: 3103
Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 1999. Five of 7 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 05/11/1999. One to 4 samples were collected per year. One sample was reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33387, Phosphorus

Region 9

Murrieta Creek

LOE ID:	3102
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	100
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Rancho California Water District from 1999 to 2002. One hundred of 160 samples were in exceedance (Rancho California Water District, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected 4 times per month from 03/31/1999 to 04/17/2002.
Environmental Conditions:	

QAPP Information:
QAPP Information Reference(s):

QA Info Missing

Line of Evidence (LOE) for Decision ID 33387, Phosphorus

Region 9

Murrieta Creek

LOE ID: 74448

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 5

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: 5 of 7 samples exceed the water quality objective for Total Phosphorus for Murrieta Creek.
Data Reference: [Data for Various Pollutants in Riverside County, 2007-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Table 3-2 of the San Diego Basin Plan states that the water quality objective for Total Phosphorus for Murrieta Creek is 0.1 mg/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 778 (Murrieta Creek).
Temporal Representation: Samples were collected from 12/7/2007 to 5/21/2009.
Environmental Conditions:
QAPP Information: No quality assurance information was provided.
QAPP Information Reference(s):

DECISION ID

33429

Region 9

Murrieta Creek

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceeds the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33429, Aluminum
Murrieta Creek**

Region 9

LOE ID:	3153
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall on 12/06/1999. One sample was collected. It was equal to the WQO of 0.2 mg/L. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	One sample was collected on 12/06/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33306
Murrieta Creek**

Region 9

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the Basin Plan water quality objective for chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the two samples exceed the Basin Plan water quality objective for chromium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33306, Chromium

Region 9

Murrieta Creek

LOE ID:	3123
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for total chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33306, Chromium

Region 9

Murrieta Creek

LOE ID:	3122
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Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for total chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	48180	Region 9
Murrieta Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. One of the ten samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the ten samples exceed the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples are needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48180, Oxygen, Dissolved
Murrieta Creek**

Region 9

LOE ID: 74446

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 10
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of 10 samples exceeded the objective.
Data Reference: [Data for Various Pollutants in Riverside County, 2007-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the Murietta Creek and Long Canyon sampling stations.
Temporal Representation: Samples were collected 10 times between 2007 and 2009.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

**DECISION ID 34135
Murrieta Creek**

Region 9

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 29 samples exceed the Basin Plan water quality objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 29 samples exceed the Basin Plan water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 34135, pH

Region 9

Murrieta Creek

LOE ID:	3144
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 14 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34135, pH

Region 9

Murrieta Creek

LOE ID:	74447
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three of 15 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Long Canyon Channel and Murrieta Creek @ Clinton Keith Rd stations.
Temporal Representation:	Samples were collected seventeen times between 2007 and 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	42284	Region 9
Murrieta Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Seven of 15 samples exceed the water quality objective for fecal coliform of 400/100 ml for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 15 samples exceed the water quality objective for fecal coliform of 400/100 ml for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42284, Indicator Bacteria**Region 9****Murrieta Creek**

LOE ID:	74449
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the seven samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Total Coliform concentration shall not exceed more than 10000/100 ml. Guidance for Fresh Water Beaches (CDPH).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	The samples were collected at Murrieta Creek and Long Canyon.
Temporal Representation:	Samples were collected between October, November and December 2008 and February and May 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42284, Indicator Bacteria**Region 9****Murrieta Creek**

LOE ID:	74445
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the seven samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. Basin Plan for the

Objective/Criterion Reference:	San Diego Basin. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	The samples were collected at Murrieta Creek and Long Canyon.
Temporal Representation:	Samples were collected between October, November and December 2008 and February and May 2009.
Environmental Conditions: QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42284, Indicator Bacteria

Region 9

Murrieta Creek

LOE ID:	7399
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Four out of eight samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'47.0" N/117°08'34.8" W.
Temporal Representation:	Three to four samples are collected per monitoring year. Samples were collected from October 2004 through May 2006.
Environmental Conditions: QAPP Information:	Quality assurance conducted under Riverside County's quality assurance plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

Line of Evidence (LOE) for Decision ID 42284, Indicator Bacteria

Region 9

Murrieta Creek

LOE ID:	74444
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the seven samples exceeded the E.coli objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E. coli concentration shall not exceed more than 235/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Murrieta Creek and Long Canyon.
Temporal Representation:	Samples were collected between October, November and December 2008 and February and May 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42284, Indicator Bacteria

Region 9

Murrieta Creek

LOE ID:	7401
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Four out of eight samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The maximum E. coli level for moderately or lightly used areas is 406 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'26.4" N/117°07'46.1" W.
Temporal Representation:	Three to four samples are collected per monitoring year. Samples were collected from October 2004 through May 2006.
Environmental Conditions:	

DECISION ID	44246	Region 9
Murrieta Creek		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess pollutant. Six of the nine samples exhibited water toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the nine samples exhibited water toxicity and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44246, Toxicity	Region 9
Murrieta Creek	

LOE ID:	6460
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five out of seven samples collected exceed the water quality objective of 0.025 ug/L according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through May 2006.

Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 1-hour average concentration of chlorpyrifos in freshwater is 0.025 ug/L according to Siepmann and Finlayson, 2000; Finlayson, 2004.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'47.0" N/117°08'34.8" W.
Temporal Representation:	Four to five samples are collected per monitoring year. Samples were collected from July 2004 through May 2006.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted under Riverside County's quality assurance plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

Line of Evidence (LOE) for Decision ID 44246, Toxicity
Murrieta Creek

Region 9

LOE ID:	7510
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	Effluent toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Hyalella azteca- Six out of nine samples were found to be toxic to Hyalella azteca.</p> <p>Selenastrum capricornutum- None of nine samples were found to be toxic to green algae, Selenastrum capricornutum, growth test according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006.</p> <p>Samples were collected from October 2004 through May 2006.</p>
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the

Spatial Representation: Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'47.0" N/117°08'34.8" W.

Temporal Representation: Three to four samples are collected per monitoring year. Samples were collected from October 2004 through March 2006.

Environmental Conditions:

QAPP Information: Quality assurance conducted under Riverside County's quality assurance plan.

QAPP Information Reference(s): [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

Line of Evidence (LOE) for Decision ID 44246, Toxicity

Region 9

Murrieta Creek

LOE ID: 6461

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 9

Number of Exceedances: 4

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: Four out of nine samples collected exceed the water quality objective for the 1-hour average concentration of copper. according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through May 2006.

Data Reference: [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb, but these criteria may vary depending upon hardness of the sample.

Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'47.0" N/117°08'34.8" W.

Temporal Representation: Four to five samples were collected per monitoring year. Samples were collected from July 2004 through May 2006.

Environmental Conditions:

QAPP Information: Quality assurance conducted under Riverside County's quality assurance plan.

QAPP Information Reference(s): [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

DECISION ID 32720

Region 9

Murrieta Creek

Pollutant: Antimony

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the two samples exceed the Basin Plan water quality objective for antimony.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the two samples exceed the Basin Plan water quality objective for antimony and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32720, Antimony Murrieta Creek

Region 9

LOE ID:	3114
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 32720, Antimony

Region 9

Murrieta Creek

LOE ID: 3113

Pollutant: Antimony
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the RWQCB on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For all waters with a municipal beneficial use, the WQO for antimony is 0.006 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

33488

Region 9

Murrieta Creek

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 51 samples exceed the Basin Plan water quality objective for arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 51 samples exceed the Basin Plan water quality objective for arsenic and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33488, Arsenic

Region 9

Murrieta Creek

LOE ID:	3115
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB on 06/09/1998. One sample was collected, and it was in exceedance of the water quality objective (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33488, Arsenic

Region 9

Murrieta Creek

LOE ID:	3116
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek at Temecula. Exact location was not reported.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33488, Arsenic

Region 9

Murrieta Creek

LOE ID:	3117
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The Riverside County Flood Control and Water Conservation District collected water samples from 1994 to 2005 for their NPDES MS4 Permit. Of the 39 samples, only 1 was in exceedance of the WQO (RCFCWCD, 2005).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected on Murrieta Creek, however, sites were not specified.
Temporal Representation:	The samples were collected from September 1994 to May 2005.
Environmental Conditions:	
QAPP Information:	Data was collected under an appropriate QAPP consistent with section 6.1.4 of the Listing Policy.
QAPP Information Reference(s):	

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 7 of 7 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 7 of 7 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy, however as required under section 3.9 of the Listing Policy, pollutant(s) could not be directly associated with the Benthic Community Effects.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

LOE ID:	26545
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples of IBI data were taken from May 1998 to November 2000 at two sampling sites. Of the total number of samples, all seven samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 902MCGSxx and 902MCWBxx on Murrieta Creek.
Temporal Representation:	Sampling occurred during one to four events annually for a period of three years from May 1998 to November 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID	33019	Region 9
Murrieta Creek		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the two samples exceed the Basin Plan water quality objective for beryllium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the two samples exceed the Basin Plan water quality objective for beryllium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33019, Beryllium

Region 9

Murrieta Creek

LOE ID:	3118
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected. It was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	Sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33019, Beryllium

Region 9

Murrieta Creek

LOE ID:	3119
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected. It was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation:	Sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	42649	Region 9
Murrieta Creek		

Pollutant:	Boron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for boron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 11 samples exceed the Basin Plan water quality objective for boron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42649, Boron	Region 9
Murrieta Creek	

LOE ID: 3152

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Boron is 0.75 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek at Temecula. Exact location was not reported.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33067	Region 9
Murrieta Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the Basin Plan water quality objective for cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the two samples exceed the Basin Plan water quality objective for cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33067, Cadmium

Region 9

Murrieta Creek

LOE ID:	3120
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33067, Cadmium

Region 9

Murrieta Creek

LOE ID:	3121
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33428	Region 9
Murrieta Creek		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Basin Plan water quality objective for chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Basin Plan water quality objective for chloride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33428, Chloride	Region 9
Murrieta Creek	

LOE ID:	3151
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 15 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in the Murrieta HA and all beneficial uses, the WQO for Chloride is 300 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43413	Region 9
Murrieta Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Cyanide Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the six samples exceed the Basin Plan water quality objective for cyanide.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the six samples exceed the Basin Plan water quality objective for cyanide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43413, Cyanide

Region 9

Murrieta Creek

LOE ID:	3150
Pollutant:	Cyanide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall on 6 days from 1997 to 2000. All 6 samples were non-detect. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For waters with a municipal beneficial use, the WQO for Cyanide is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected in 1997-2000. One to 2 samples were collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

43061

Region 9

Murrieta Creek

Pollutant:	Fluoride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for fluoride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 11 samples exceed the Basin Plan water quality objective for fluoride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43061, Fluoride

Region 9

Murrieta Creek

LOE ID:	3149
Pollutant:	Fluoride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Fluoride is 1.0 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

DECISION ID	32726	Region 9
Murrieta Creek		

Pollutant: Mercury
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One of the eight samples exceed the Basin Plan water quality objective for mercury.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the eight samples exceed the Basin Plan water quality objective for mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32726, Mercury	Region 9
Murrieta Creek	

LOE ID: 3128
Pollutant: Mercury
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 1
Number of Exceedances: 1
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32726, Mercury

Region 9

Murrieta Creek

LOE ID:	3129
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32726, Mercury

Region 9

Murrieta Creek

LOE ID:	3130
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32620	Region 9
Murrieta Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the two samples exceed the Basin Plan water quality objective for nickel. These samples were collected on the same day, so they are counted as one per section 6.1.5.3 of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the two samples exceed the Basin Plan water quality objective for nickel and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32620, Nickel

Region 9

Murrieta Creek

LOE ID: 3131

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32620, Nickel

Region 9

Murrieta Creek

LOE ID: 3132

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33332	Region 9
Murrieta Creek		

Pollutant:	Oil and Grease
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. This conclusion is based on the fact that the data shows 1 out of 15 samples had "detectable levels" of oil and grease. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This conclusion is based on the fact that the data shows 1 out of 15 samples had "detectable levels" of oil and grease and this information is insufficient to determine with the confidence and power required by the Listing Policy. There is no numeric water quality objective to compare the data to, to determine if water quality objectives are being met or exceeded. A minimum of five samples is needed for application of table 3.2 when there is a numeric water quality objective.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 33332, Oil and Grease		Region 9
Murrieta Creek		

LOE ID:	3145
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Pollutant:	Oil and Grease
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Fourteen of 15 samples were non-detect. A measured value of 1.2 mg/L was reported for 1 of 15 samples. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, for Oil and Grease, waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32621	Region 9
Murrieta Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the two samples exceed the Basin Plan water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the two samples exceed the Basin Plan water quality objective for selenium and this sample

size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32621, Selenium

Region 9

Murrieta Creek

LOE ID:	3134
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32621, Selenium

Region 9

Murrieta Creek

LOE ID:	3133
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33256	Region 9
Murrieta Creek		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan water quality objective for silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 2 samples exceed the Basin Plan water quality objective for silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33256, Silver	Region 9
Murrieta Creek	

LOE ID:	3135
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33256, Silver Murrieta Creek

Region 9

LOE ID:	3136
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33331	Region 9
Murrieta Creek		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 11 samples exceed the Basin Plan water quality objective for sulfate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 11 samples exceed the Basin Plan water quality objective for sulfate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33331, Sulfates	Region 9
Murrieta Creek	

LOE ID:	3143
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in the Murrieta HA and all beneficial uses, the WQO for sulfate is 300 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One sample was reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	42752	Region 9
Murrieta Creek		

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 171 samples exceed the Basin Plan water quality objective for MBAS.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 171 samples exceed the Basin Plan water quality objective for MBAS and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42752, Surfactants (MBAS)	Region 9
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Murrieta Creek

LOE ID:	3110
Pollutant:	Surfactants (MBAS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. One of 11 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for MBAS is 0.5 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One sample was reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42752, Surfactants (MBAS)**Region 9****Murrieta Creek**

LOE ID:	3109
Pollutant:	Surfactants (MBAS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the Rancho California Water District from 1999 to 2002. One of 160 samples was in exceedance. (Rancho California Water District, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for MBAS is 0.5 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation: Samples were collected 4 times per month from 03/31/1999 to 04/17/2002.
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

DECISION ID	43231	Region 9
Murrieta Creek		

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the Basin Plan water quality objective for Thallium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the two samples exceed the Basin Plan water quality objective for Thallium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 43231, Thallium	Region 9
Murrieta Creek	

LOE ID:	3138
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43231, Thallium Murrieta Creek

Region 9

LOE ID:	3137
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33483

Region 9

Pollutant: Total Dissolved Solids
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of 173 samples exceed the Basin Plan water quality objective for total dissolved solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-five of 173 samples exceed the Basin Plan water quality objective for total dissolved solids and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33483, Total Dissolved Solids

Region 9

Murrieta Creek

LOE ID: 3107

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 on 06/09/1998. One sample was collected, it was in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters in the Murrieta HA and all beneficial uses, the WQO for TDS is 750 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33483, Total Dissolved Solids

Region 9

Murrieta Creek

LOE ID: 3106

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 on 06/09/1998. The single sample was not in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters in the Murrieta HA and all beneficial uses, the WQO for TDS is 750 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33483, Total Dissolved Solids

Region 9

Murrieta Creek

LOE ID: 3108

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 11
Number of Exceedances: 1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. One of 11 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan : For inland surface waters in the Murrieta HA, and all beneficial uses, the WQO for total dissolved solids is 750 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One sample was reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33483, Total Dissolved Solids

Region 9

Murrieta Creek

LOE ID:	3105
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Rancho California Water District from 1999 to 2002. Twenty-three of 160 samples were in exceedance. (Rancho California Water District, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan : For inland surface waters in the Murrieta HA, and all beneficial uses, the WQO for total dissolved solids is 750 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected 4 times per month from 03/31/1999 to 04/17/2002.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID
Murrieta Creek

33484

Region 9

Pollutant:
Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Turbidity
Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the two samples exceed the Basin Plan water quality objective for turbidity.

Application of table 3.2 of the Listing Policy requires a minimum of five samples to assess a conventional pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the two samples exceed the Basin Plan water quality objective for turbidity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33484, Turbidity
Murrieta Creek

Region 9

LOE ID: 3112

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the RWQCB on 06/09/1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at Murrieta Creek behind the cement factory.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33484, Turbidity

Region 9

Murrieta Creek

LOE ID:	3111
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 on 06/09/1998. The single sample was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33330

Region 9

Murrieta Creek

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the

2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 56 samples exceed the Basin Plan water quality objective for zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 56 samples exceed the Basin Plan water quality objective for zinc and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33330, Zinc

Region 9

Murrieta Creek

LOE ID:	3139
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the San Diego Regional Board on 06/09/1998. One sample was collected, it was in exceedance of the water quality objective (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek at Calle Del Oso Rd.
Temporal Representation:	One sample was collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33330, Zinc

Region 9

Murrieta Creek

LOE ID:	3142
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The Riverside County Flood Control and Water Conservation District collected water samples from 1994 to 2005 for their NPDES MS4 Permit. Of the 43 samples, none were in exceedance of the water quality objective (RCFCWCD, 2005).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected on Murrieta Creek, however sites were not specified.
Temporal Representation:	The samples were collected from September 1994 to May 2005.
Environmental Conditions:	
QAPP Information:	Data was collected under an appropriate QAPP consistent with section 6.1.4 of the Listing Policy.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33330, Zinc**Region 9****Murrieta Creek**

LOE ID:	3141
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance of the water quality objective (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation: Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One sample was reported per sampling day.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33330, Zinc

Region 9

Murrieta Creek

LOE ID: 3140

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the San Diego Regional Board on 06/09/1998. One sample was collected, it was in exceedance (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Murrieta Creek behind the cement factory.
Temporal Representation: One sample was collected on 06/09/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 42375

Region 9

Murrieta Creek

Pollutant: Chlorpyrifos
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Five of the seven samples exceed the San Diego Basin Plan water quality objective for Chlorpyrifos and the Siepmann and Finlayson water quality objective for the concentration of chlorpyrifos in freshwater.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the seven samples exceed the San Diego Basin Plan water quality objective for Chlorpyrifos and the Siepmann and Finlayson water quality objective for the concentration of chlorpyrifos in freshwater and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42375, Chlorpyrifos

Region 9

Murrieta Creek

LOE ID:	6460
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five out of seven samples collected exceed the water quality objective of 0.025 ug/L according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 1-hour average concentration of chlorpyrifos in freshwater is 0.025 ug/L according to Siepmann and Finlayson, 2000; Finlayson, 2004.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'47.0" N/117°08'34.8" W.
Temporal Representation:	Four to five samples are collected per monitoring year. Samples were collected from July 2004 through May 2006.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted under Riverside County's quality assurance plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

Line of Evidence (LOE) for Decision ID 42375, Chlorpyrifos

Region 9

Murrieta Creek

LOE ID:	7510
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	Effluent toxicity testing (chronic)
Data Used to Assess Water Quality:	<p><i>Hyalella azteca</i>- Six out of nine samples were found to be toxic to <i>Hyalella azteca</i>.</p> <p><i>Selenastrum capricornutum</i>- None of nine samples were found to be toxic to green algae, <i>Selenastrum capricornutum</i>, growth test according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006.</p>
Data Reference:	<p>Samples were collected from October 2004 through May 2006.</p> <p>Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'47.0" N/117°08'34.8" W.
Temporal Representation:	Three to four samples are collected per monitoring year. Samples were collected from October 2004 through March 2006.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted under Riverside County's quality assurance plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

DECISION ID

33307

Region 9

Murrieta Creek

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Four of the nine samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of nine samples exceed the CTR, dissolved copper acute criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33307, Copper Murrieta Creek

Region 9

LOE ID:	3124
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the San Diego Regional Board on 06/09/1998. One sample was collected and it exceeded the water quality objective (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the water quality objective for Copper is 1.0 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Sample was collected at Murrieta Creek at Calle Del Oso Rd.

Temporal Representation: One sample was collected on 06/09/1998.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33307, Copper

Region 9

Murrieta Creek

LOE ID: 3125

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the San Diego Regional Board on 06/09/1998. One sample was collected, it was in exceedance (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Sample was collected at Murrieta Creek behind the cement factory.

Temporal Representation: One sample was collected on 06/09/1998.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33307, Copper

Region 9

Murrieta Creek

LOE ID: 3127

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 43

Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The Riverside County Flood Control and Water Conservation District collected water samples from 1994 to 2005 for their NPDES MS4 Permit. Of the 43 samples, none was in exceedance of the WQO (RCFCWCD, 2005).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected on Murrieta Creek, however sites were not specified.
Temporal Representation:	The samples were collected from September 1994 to May 2005.
Environmental Conditions:	
QAPP Information:	Data was collected under an appropriate QAPP consistent with section 6.1.4 of the Listing Policy.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33307, Copper

Region 9

Murrieta Creek

LOE ID:	3126
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. None of the 11 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33307, Copper

Region 9

Murrieta Creek

LOE ID:	6461
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four out of nine samples collected exceed the water quality objective for the 1-hour average concentration of copper. according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb, but these criteria may vary depending upon hardness of the sample.
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek at USGS weir, lat/long: 33°28'47.0" N/117°08'34.8" W.
Temporal Representation:	Four to five samples were collected per monitoring year. Samples were collected from July 2004 through May 2006.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted under Riverside County's quality assurance plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

DECISION ID	33420	Region 9
Murrieta Creek		

Pollutant:	Iron
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Five of 11 samples exceed the Basin Plan water quality objective for iron.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 11 samples exceed the Basin Plan water quality objective for iron and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33420, Iron
Murrieta Creek**

Region 9

LOE ID:	3148
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Five of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for iron is 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33419
Murrieta Creek**

Region 9

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of the 11 samples exceed the Basin Plan water quality objective for manganese.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 11 samples exceed the Basin Plan water quality objective for manganese and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33419, Manganese Murrieta Creek

Region 9

LOE ID:	3147
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 2000. Seven of 11 samples were in exceedance (San Diego RWQCB)
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Murrieta Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected from 12/09/1997 to 06/01/2000. One to 4 samples were collected per year. One to 2 samples were reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43555	Region 9
Murrieta Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This following decision is carried over from the previous listing cycle (with update to table 3.1):

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Thirty nine of the 164 samples exceed the Basin Plan water quality objective for total nitrogen as N.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty nine of the 164 samples exceed the Basin Plan water quality objective for total nitrogen as N, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43555, Nitrogen	Region 9
Murrieta Creek	

LOE ID:	3146
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by LAW Crandall from 1997 to 1999. Four N:P ratios were calculated, according to days on which both Nitrogen and Phosphorus samples were collected. None of the 4 ratios were in exceedance of the 10:1 N:P ratio.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters for all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not given.
Temporal Representation:	Samples were collected from 12/09/1997 to 12/06/1999. One to 4 samples were collected per year. One sample was reported per sampling day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43555, Nitrogen

Region 9

Murrieta Creek

LOE ID:	3104
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Rancho California Water District from 1999 to 2002. The N:P ratio was used to assess data. Thirty-nine of 160 samples exceeded the 10:1 ratio.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters and all beneficial uses, for Nitrogen, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Murrieta Creek. Exact location was not reported.
Temporal Representation:	Samples were collected 4 times per month from 03/31/1999 to 04/17/2002.
Environmental Conditions:	

QAPP Information:

QAPP Information Reference(s):

QA Info Missing

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Temecula Creek](#)
Water Body ID: CAR9025100020011025111323
Water Body Type: River & Stream

DECISION ID	34014	Region 9
Temecula Creek		

Pollutant: Phosphorus
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess pollutant. One-hundred forty-eight of 169 samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One-hundred forty-eight of 169 samples exceeded the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34014, Phosphorus	Region 9
Temecula Creek	

LOE ID: 77113

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	9 of 9 samples exceed the water quality objective for Total Phosphorus for Temecula Creek.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Table 3-2 of the San Diego Basin Plan states that the water quality objective for Total Phosphorus for Temecula Creek is 0.1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 777 (Temecula Creek).
Temporal Representation:	Samples were collected from 10/16/2007 to 5/21/2009.
Environmental Conditions:	
QAPP Information:	No quality assurance information was provided.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34014, Phosphorus

Region 9

Temecula Creek

LOE ID:	3158
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	139
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the Rancho California Water District in 1999-2002. There were 139 of 160 samples that were in exceedance (RCWD, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters - streams and other flowing waters and all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at Temecula Creek.
Temporal Representation:	Samples were collected 4-5 times per month from 03/31/1999 to 04/17/2002.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

47963

Region 9

Temecula Creek

Pollutant: Oxygen, Dissolved
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single lines of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the seven samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of seven samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47963, Oxygen, Dissolved

Region 9

Temecula Creek

LOE ID: 77111

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of 7 samples exceeded the objective.
Data Reference: [Data for Various Pollutants in Riverside County, 2007-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the Temecula Creek station.
Temporal Representation: Samples were collected seven times between 2007 and 2009.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

DECISION ID	47960	Region 9
Temecula Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47960, pH	Region 9
Temecula Creek	

LOE ID:	77112
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Zero of 8 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Temecula Creek station.
Temporal Representation:	Eight samples were between 2007 and 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	42027	Region 9
Temecula Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 7 of 7 and 9 of 14 singles samples exceed the water quality objectives for E. Coli of 235/100ml and fecal coliform of 400/100ml for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. With the latest data, 7 of 7 and 9 of 14 singles samples exceed the water quality objectives for E. Coli of 235/100ml and fecal coliform of 400/100ml for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42027, Indicator Bacteria	Region 9
Temecula Creek	

LOE ID:	72784
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the seven samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The total coliform concentration shall not exceed more than 10000/100 ml. Guidance For Fresh Water Beaches (CDPH).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	The samples were collected at Temecula Creek.
Temporal Representation:	Samples were collected between October 2007 and May 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42027, Indicator Bacteria
Temecula Creek

Region 9

LOE ID:	72783
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the seven samples exceeded the fecal Coliform objectivec
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Temecula Creek.
Temporal Representation:	Samples were collected between October 2007 and May 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42027, Indicator Bacteria	Region 9
Temecula Creek	

LOE ID:	72782
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the seven samples exceeded the E. coli objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E.Coli concentration shall not exceed more than 235/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Temecula Creek.
Temporal Representation:	Samples were collected between October 2007 and May 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42027, Indicator Bacteria	Region 9
Temecula Creek	

LOE ID:	7403
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four out of seven samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress

Data Reference:	report from 2005 and 2006. Samples were collected from October 2004 through May 2006. Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Temecula Creek below Pala Road, lat/long: 33°28'26.4" N/117°07'46.1" W.
Temporal Representation:	Four samples are collected per monitoring year. Samples were collected from October 2004 through May 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, three samples represent wet weather and two samples represent dry weather. However, one sampling event in both the 2004-2005 and 2005-2006 monitoring year did not analyze for all constituents.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42027, Indicator Bacteria

Temecula Creek

Region 9

LOE ID:	7152
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four out of seven samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The maximum E. coli level for moderately or lightly used areas is 406 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Temecula Creek below Pala Road, lat/long: 33°28'26.4" N/117°07'46.1" W.
Temporal Representation:	Four samples are collected per monitoring year. Samples were collected from October 2004 through May 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, three samples represent wet weather and two samples represent dry weather. However, one sampling event in both the 2004-2005 and 2005-2006 monitoring year did not analyze for all constituents.

QAPP Information:

QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

DECISION ID	43130	Region 9
Temecula Creek		

Pollutant: Nitrogen
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Original
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Nineteen of the 160 samples exceed the objective and, although this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy, the quality of data is uncertain (QA information missing) and the data are old (1999-2002).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used does not satisfy the data quality requirements of section 6.1.4 of the Policy (QA information not available).
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Although 19 of 160 samples exceeded the objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy, the data are of uncertain quality and relatively old.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43130, Nitrogen	Region 9
Temecula Creek	

LOE ID: 3159

Pollutant: Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 160
Number of Exceedances: 19

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by Ranch California Water District from 1999 to 2002. Nineteen of 160 samples were in exceedance (RCWD, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters and all beneficial uses, analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Temecula Creek.

Temporal Representation: Samples were collected 4-5 times per month from 03/1999 to 04/2002

Environmental Conditions:

QAPP Information: QA Info Missing

QAPP Information Reference(s):

DECISION ID	43915	Region 9
Temecula Creek		

Pollutant: **Benthic Community Effects**

Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 4 of 7 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 4 of 7 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43915, Benthic Community Effects	Region 9
Temecula Creek	

LOE ID: 3157

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores at TC-I-15 ranged from 109 to 136, higher scores compared to other sampled waterbodies. BMI scores at TC-I-15 were either slightly above or slightly below average, compared to other sampled waterbodies. (SDRWQCB, 1999A).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Temecula Creek, 5 riffles immediately downstream of I-15 (TC-I-15).
Temporal Representation:	Samples were collected in May, September, November 1998 and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43915, Benthic Community Effects

Region 9

Temecula Creek

LOE ID:	26472
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples of IBI data were taken from May 1998 to November 2000 at one sampling site. Of the total number of samples, four samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 902TCI15x on Temecula Creek.
Temporal Representation:	Sampling occurred during two to three events from May 1998 to November 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID	33567	Region 9
Temecula Creek		

Pollutant:	Boron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of 160 of the samples exceed the Basin Plan water quality objective for Boron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of 160 of the samples exceed the Basin Plan water quality objective for Boron and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33567, Boron	Region 9
Temecula Creek	

LOE ID:	3161
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by Rancho California Water District from 1999 to 2002. None of the 160 samples were in exceedance (RCWD, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for boron is 0.75 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Temecula Creek.
Temporal Representation:	Samples were collected 4-5 times per month from 03/31/1999 to 04/17/2002.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33566	Region 9
Temecula Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Surfactants (MBAS) Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of 160 of the samples exceed the Basin Plan water quality objective for surfactants.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of 160 of the samples exceed the Basin Plan water quality objective for surfactants and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33566, Surfactants (MBAS)

Region 9

Temecula Creek

LOE ID: 3160

Pollutant: Surfactants (MBAS)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 160

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by Rancho California Water District from 1999 to 2002. None of the 160 samples were in exceedance (RCWD, 2002).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for MBAS is 0.5 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Temecula Creek.

Temporal Representation: Samples were collected 4-5 times per month from 03/31/1999 to 04/17/2002.

Environmental Conditions:

QAPP Information: QA Info Missing

QAPP Information Reference(s):

DECISION ID 37925

Region 9

Temecula Creek

Pollutant: Turbidity

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37925, Turbidity
Temecula Creek**

Region 9

LOE ID:	3156
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB 9 in 1998. One sample was collected and was not in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5.0 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Temecula Creek east of the confluence, west of I-15.
Temporal Representation:	Samples were collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 43283
Temecula Creek**

Region 9

Pollutant:	Chlorpyrifos
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of nine of the samples exceed the Basin Plan water quality objective for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of nine of the samples exceed the Basin Plan water quality objective for Chlorpyrifos and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43283, Chlorpyrifos Temecula Creek

Region 9

LOE ID:	6462
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Seven out of nine samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 4-day average concentration of chlorpyrifos in freshwater is 0.014 ug/L. The 1-hour average concentration of chlorpyrifos in freshwater is 0.025 ug/L according to Siepmann and Finlayson, 2000; Finlayson, 2004.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Samples were collected at Temecula Creek below Pala Road, lat/long: 33°28'26.4" N/117°07'46.1" W.
Temporal Representation:	Four to six samples are collected per monitoring year. Samples were collected from October 2004 through May 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, three samples represent wet weather and two samples represent dry weather. However, one sampling event in the 2004-2005 monitoring year did not analyze for all constituents.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	42511	Region 9
Temecula Creek		

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of eight of the samples exceed the CTR water quality objective for copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of eight of the samples exceed the CTR water quality objective for copper and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42511, Copper	Region 9
Temecula Creek	

LOE ID:	6515
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of eight samples exceeded the warm freshwater habitat water quality objective for Copper from results in the Riverside County Flood Control and Water Conservation annual progress reports from 2005 and 2006. The eight samples were collected between October 2004 and May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb, but these criteria may vary depending upon hardness of the sample (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Temecula Creek below Pala Road, lat/long: 33°28'26.4" N/117°07'46.1" W.
Temporal Representation:	Four to six samples are collected per monitoring year. Samples were collected from October 2004 through May 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, three samples represent wet weather and two samples represent dry weather. However, one sampling event in both the 2004-2005 and 2005-2006 monitoring years did not analyze for all constituents.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	33302	Region 9
Temecula Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One hundred fifty-seven of the 161 samples exceed the water quality objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred fifty-seven of the 161 samples exceed the Basin Plan objective, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33302, Total Dissolved Solids

Region 9

Temecula Creek

LOE ID:	3154
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Temecula Creek east of the confluence, west of I-15.
Temporal Representation:	Samples were collected on 06/09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33302, Total Dissolved Solids

Region 9

Temecula Creek

LOE ID:	3155
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	156
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by Rancho California Water District from 1999 to 2002. There were 156 of 160 samples that were in exceedance (RCWD, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Temecula Creek.
Temporal Representation:	Samples were collected 4-5 times per month from 03/31/1999 to 04/17/2002.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	42672	Region 9
Temecula Creek		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of seven of the samples exceed the water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of seven of the samples exceed the Basin Plan water quality objective for toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42672, Toxicity

Region 9

Temecula Creek

LOE ID:	7511
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Hyalella Azteca-</p> <p>Three out of seven samples were found to have acute toxicity by the Hyalella Azteca growth/survival test.</p> <p>Selenastrum capricornutum-</p> <p>None of seven samples were found to have toxicity by the green alage, Selenastrum capricornutum, growth test. Toxicity results were in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through March 2006.</p>
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at Temecula Creek below Pala Road, lat/long: 33°28'26.4" N/117°07'46.1" W.
Temporal Representation:	Three to four samples are collected per monitoring year. Samples were collected from October 2004 through March 2006.
Environmental Conditions:	Toxicity testing is conducted on all storm event samples (at least three annually).
QAPP Information:	Quality control conducted in compliance with the Riverside County's quality assurance plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Long Canyon Creek \(tributary to Murrieta Creek\)](#)
Water Body ID: CAR9028300020011025112509
Water Body Type: River & Stream

DECISION ID	43281	Region 9
Long Canyon Creek (tributary to Murrieta Creek)		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3, one line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Four of four samples exceed the water quality objectives for E. coli., and fecal coliform, respectively, for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceed the water quality objectives for E. coli., and fecal coliform, respectively, for the protection of REC-1 beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43281, Indicator Bacteria	Region 9
Long Canyon Creek (tributary to Murrieta Creek)	

LOE ID: 7398
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected on 10/20/04, 12/28/04, 10/18/05 and 2/27/06.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Long Canyon Creek. Lat/long: 33°30 38 N/117°09 40 W.
Temporal Representation:	Samples were collected on 10/20/04, 12/28/04, 10/18/05 and 2/27/06.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event.
QAPP Information:	Quality assurance conducted according to the Riverside County's Consolidated Monitoring Plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

Line of Evidence (LOE) for Decision ID 43281, Indicator Bacteria

Region 9

Long Canyon Creek (tributary to Murrieta Creek)

LOE ID:	7150
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceed the water quality objective according to the results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected on 10/20/04, 12/28/04, 10/18/05 and 2/27/06.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The maximum E. coli level for moderately or lightly used areas is 406 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Long Canyon Creek. Lat/long: 33°30 38 N/117°09 40 W.
Temporal Representation:	Samples were collected on 10/20/04, 12/28/04, 10/18/05 and 2/27/06.

Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event.
QAPP Information:	Quality assurance conducted according to the Riverside County's Consolidated Monitoring Plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

DECISION ID	44458	Region 9
Long Canyon Creek (tributary to Murrieta Creek)		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the water quality objective.</p> <p>According to table 3.1 of the Listing Policy, the minimum sample requirement to assess conventional pollutants is 2.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the four samples exceeded the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44458, Nitrogen	Region 9
Long Canyon Creek (tributary to Murrieta Creek)	

LOE ID:	6265
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceed the evaluation guideline of 1 mg/L according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected on 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at station 780 Long Canyon Creek. Lat/long: 33°30 38 N/117°09 40 W.
Temporal Representation:	Samples were collected on 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event.
QAPP Information:	Quality assurance conducted according to the Riverside County's Consolidated Monitoring Plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

DECISION ID	43253	Region 9
Long Canyon Creek (tributary to Murrieta Creek)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 43253, Phosphorus
Long Canyon Creek (tributary to Murrieta Creek)**

Region 9

LOE ID:	6266
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceed the evaluation guideline according to results in the Riverside County Flood Control and Water Conservation District annual progress reports. Samples were collected on 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). The Water Quality Control Plan for San Diego Basin Plan which has a goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at station 780 Long Canyon Creek. Lat/long: 33°30 38 N/117°09 40 W.
Temporal Representation:	Samples were collected on 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event.
QAPP Information:	Quality assurance conducted according to the Riverside County's Consolidated Monitoring Plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

**DECISION ID 33406
Long Canyon Creek (tributary to Murrieta Creek)**

Region 9

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final	Delist from 303(d) list (TMDL required list)(2012)

Listing Decision:
Revision Status
Reason for Delisting:
Impairment from Pollutant or Pollution:

Original
Flaws in original listing
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 one line(s) of evidence are necessary to assess listing status.

No lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33406, Total Dissolved Solids
Long Canyon Creek (tributary to Murrieta Creek)**

Region 9

LOE ID: 3164

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 25
Number of Exceedances: 6

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 1997 and 1998. Six of the 25 samples were in exceedance. All 6 samples were collected on 01/29/1998.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Long Canyon Creek site LCC2.
Temporal Representation: Samples were collected on 03/12/1997, 05/13/1997, 06/18/1997, and 01/29/1998. Five to nine of the samples were collected per day over a period of 3 minutes to 1.5 hours.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

43219

Region 9

Long Canyon Creek (tributary to Murrieta Creek)

Pollutant: Chlorpyrifos
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the 4 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 4 samples exceed the Basin Plan objective for pesticides and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43219, Chlorpyrifos Long Canyon Creek (tributary to Murrieta Creek)

Region 9

LOE ID: 6456

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Three out of four samples exceeded 1-hour average concentration of Chlorpyrifos according to results in the Riverside County Flood Control and Water Conservation District's Watershed Annual Progress Report from 2005 and 2006. Samples were collected on 10/20/04, 12/28/04, 10/18/05, and 2/27/06.

Data Reference: [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 4-day average concentration of chlorpyrifos in freshwater is 0.014 ug/L. The 1-hour average concentration of chlorpyrifos in freshwater is 0.025 ug/L according to Siepmann and Finlayson, 2000; Finlayson, 2004.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at station 780 on Long Canyon Creek. Lat/long: 33°30' 38" N/117°09' 40" W.
Temporal Representation:	Samples were collected on the following dates: 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event.
QAPP Information:	Quality assurance conducted according to the Riverside County's Consolidated Monitoring Plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

DECISION ID 43326		Region 9
Long Canyon Creek (tributary to Murrieta Creek)		
Pollutant:	Iron	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 4 samples exceed the secondary drinking water MCL for iron and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not	

changed.

**Line of Evidence (LOE) for Decision ID 43326, Iron
Long Canyon Creek (tributary to Murrieta Creek)**

Region 9

LOE ID:	6264
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected on 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, inland surface waters designated as domestic or municipal supply, shall not contain concentrations of iron in excess of the secondary maximum contaminant level 0.3 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Long Canyon Creek. Lat/long: 33°30 38 N/117°09 40 W.
Temporal Representation:	Samples were collected on the following dates: 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Riverside County's Consolidated Monitoring Plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

**DECISION ID 43363
Long Canyon Creek (tributary to Murrieta Creek)**

Region 9

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceed the secondary drinking water MCL for Mn and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43363, Manganese
Long Canyon Creek (tributary to Murrieta Creek)**

Region 9

LOE ID:	6458
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected on 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, inland surface waters designated as domestic or municipal supply shall not contain concentrations of manganese in excess of the secondary maximum contaminant level 0.05 mg/L (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station 780 on Long Canyon Creek. Lat/long: 33°30 38 N/117°09 40 W.
Temporal Representation:	Samples were collected on the following dates: 10/20/04, 12/28/04, 10/18/05, and 2/27/06.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event.
QAPP Information:	Quality assurance conducted according to the Riverside County's Consolidated Monitoring Plan.
QAPP Information Reference(s):	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Luis Rey River, Lower \(west of Interstate 15\)](#)
Water Body ID: CAR9031100020011005104327
Water Body Type: River & Stream

DECISION ID 43548

Region 9

San Luis Rey River, Lower (west of Interstate 15)

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown | Unknown Nonpoint Source | Unknown Point Source
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant.

Enterococcus

22 of 23 samples exceed the single sample objective for water contact recreation.

Fecal coliform

13 of 23 samples exceed the single sample objective for water contact recreation.

Total coliform

1 of 8 samples exceed the single sample objective for water contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Samples and exceedences are as follows:

Enterococcus

22 of 23 samples exceed the single sample objective for water contact recreation.

Fecal coliform

13 of 23 samples exceed the single sample objective for water contact recreation.

Total coliform

1 of 8 samples exceed the single sample objective for water contact recreation.

The enterococcus and fecal coliform samples exceed the allowable frequency listed in Table 4.2 of the Listing Policy. The total coliform sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43548, Indicator Bacteria
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76148
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 43548, Indicator Bacteria
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	7494
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the most stringent of the US EPA bacteriological criteria for enterococcus sets a maximum limit at 61 colonies per 100mL (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Oceanside, under the Benet Road Bridge, north of Highway 76.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather. base flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43548, Indicator Bacteria	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	76132
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 43548, Indicator Bacteria	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	76203
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 43548, Indicator Bacteria
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	7495
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Eight of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 colonies per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Oceanside, under the Benet Road Bridge, north of Highway 76.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43691	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from section 303(d) list under sections 4.1 and 4.6 of the Listing Policy.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the fifty-one water samples exceed the water quality objective for toxicity. Two of the three sediment samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of keeping this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 13 of 51 water samples exceed the toxicity water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43691, Toxicity	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	7493
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Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum capricornutum- Eight samples were collected and three samples show significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test.</p> <p>Ceriodaphnia dubia- Eight samples were collected and two samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive test.</p> <p>Hyalella azteca- Eight samples were collected and none show significant toxicity levels (SL) as determined by at least one of the Hyalella azteca survival/growth test according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, September 13-14, 2004, March 1-2, April 18 and April 20, 2005.</p>
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code Â'SLÂ') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Samples were collected at monitoring station San Luis Rey River 2 and San Luis Rey River 8.
Temporal Representation:	Samples were collected at each site on the following four dates, May 18-19, September 13-14, 2004, March 1-2, April 18 and April 20, 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43691, Toxicity
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76205
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Two of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 903SLR_2003, 903SLR_2004, and 903SLR_2005. Each of these sample location names consists of a composite from three different sites.
Temporal Representation:	The samples were collected in July 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43691, Toxicity
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76204
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of Hyalella azteca, growth of Selenastrum capricornutum and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 903SLR-MLS and 903SLR-TWAS-1, San Luis Rey River.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43691, Toxicity
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76206
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. The sample did not exhibit statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is less than the evaluation threshold
Guideline Reference:	
Spatial Representation:	The sample was collected from site 903_SMC00153, San Luis Rey River, lower.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43691, Toxicity

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	23503
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum capricornutum- One of fifteen samples collected were found to be toxic as determined by the Selenastrum capricornutum growth test, Ceriodaphnia dubia survival/reproductive test.</p> <p>Ceriodaphnia dubia- Two of fifteen samples collected were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test.</p> <p>Hyalella azteca - None of the fifteen samples collected were found to be toxic as determined by the Hyalella azteca survival test according to results in the San Diego County Municipal Copermittees Report, 2007.</p>
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at mass loading station under the Benet Rd bridge north of highway 76 on the San Luis Rey River.
Temporal Representation:	Samples were collected at from 2001 through 2006
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with Weston's quality assurance plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

DECISION ID 49040**Region 9****San Luis Rey River, Lower (west of Interstate 15)**

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 28 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49040, Arsenic
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76287
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 49040, Arsenic
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID: 76289

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 27
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Arsenic.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-12/16/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID 49051

Region 9

San Luis Rey River, Lower (west of Interstate 15)

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 34 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.</p>

Line of Evidence (LOE) for Decision ID 49051, Cadmium		Region 9
San Luis Rey River, Lower (west of Interstate 15)		
LOE ID:	76297	
Pollutant:	Cadmium	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.	
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]	
Temporal Representation:	Data was collected on a single day 6/8/2009.	

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 49051, Cadmium
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID: 76071

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 26
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Cadmium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-12/16/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 49051, Cadmium
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID: 76300

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50703	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 23 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 23 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 50703, Chlorpyrifos
San Luis Rey River, Lower (west of Interstate 15)**

Region 9

LOE ID:	76073
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected over the time period 6/29/2006-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 50703, Chlorpyrifos
San Luis Rey River, Lower (west of Interstate 15)**

Region 9

LOE ID:	77827
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Chlorpyrifos. Eight sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	50637	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 50637, Chromium**Region 9****San Luis Rey River, Lower (west of Interstate 15)**

LOE ID:	76089
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 50637, Chromium**Region 9****San Luis Rey River, Lower (west of Interstate 15)**

LOE ID:	76088
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50675	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 32 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50675, Copper
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76092
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50675, Copper
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76090
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 50675, Copper

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	76112
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-12/16/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	50704	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant: Cypermethrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50704, Cypermethrin	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID: 76113

Pollutant: Cypermethrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 50704, Cypermethrin
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	78120
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50709	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50709, Deltamethrin	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	76114
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Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	50730	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the 31 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 31 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50730, Diazinon

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	76130
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston

Line of Evidence (LOE) for Decision ID 50730, Diazinon**Region 9****San Luis Rey River, Lower (west of Interstate 15)**

LOE ID:	76131
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected over the time period 6/29/2006-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID**50739****Region 9****San Luis Rey River, Lower (west of Interstate 15)**

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five</p>

samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50739, Esfenvalerate/Fenvalerate
San Luis Rey River, Lower (west of Interstate 15)**

Region 9

LOE ID:	76133
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup

QAPP Information Reference(s):

DECISION ID	50701	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 33 samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 33 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50701, Lead	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	76152
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 50701, Lead

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	76150
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]

Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50701, Lead
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76149
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 50740

Region 9

San Luis Rey River, Lower (west of Interstate 15)

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the twenty-eight samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of twenty-eight samples exceeded the GUIDELINE and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50740, Malathion
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76168
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was

	collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/8/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 50740, Malathion
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76169
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected over the time period 6/29/2006-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 52069
San Luis Rey River, Lower (west of Interstate 15)

Region 9

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 25 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52069, Nickel
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID: 76171

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Nickel.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was

	collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 52069, Nickel
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76170
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 37417
San Luis Rey River, Lower (west of Interstate 15)

Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is not being placed on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Two of the samples exceed the water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used does not satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 45 samples exceed the selenium water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not exceeded at this time.

Line of Evidence (LOE) for Decision ID 37417, Selenium

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	21182
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at San Luis Rey River station 903SLSLR2 May 2004, September 2004, March 2005, and April 2005. Two of three samples showed excessive selenium concentrations but one sample was "estimated" according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007). CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Water samples were collected at San Luis Rey River station 903SLSLR2.
Temporal Representation:	Samples were collected on May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37417, Selenium	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	30918
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Fifteen water samples were collected at San Luis Rey River station. None of the 15 samples showed excessive selenium concentrations.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007). CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Luis Rey River under Benet Rd Bridge north of Highway 76.
Temporal Representation:	Samples were collected on from November 2001 through February 2006.
Environmental Conditions:	
QAPP Information:	Quality control for this study was conducted in accordance with the Weston Solution's Quality Assurance Manual.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 37417, Selenium	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	76191
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	50741	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 42 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 42 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50741, Temperature, water
San Luis Rey River, Lower (west of Interstate 15)**

Region 9

LOE ID:	76192
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of the 42 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129). Since there is no evaluation guideline for assessing temperature for the warm freshwater aquatic life beneficial use, this line of evidence will not be used for Listing Decisions in the 2012 Integrated Report and will be retired for said Listing cycle.
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA. Davis
Spatial Representation:	Samples were collected at the following stations: SLR-010-Pacific Coast Highway Bridge SLR-020-Shearer Crossing SLR-030-Douglas Ave Bridge SLR-040-Near Mission Ave where Hwy 76 crosses SLR SLR-050-Old Hwy 395 bridge W side of Interstate 15
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

**DECISION ID 52109
San Luis Rey River, Lower (west of Interstate 15)**

Region 9

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 33 samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 33 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52109, Zinc

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID: 76218

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 1 monitoring site [San Luis Rey River at Highway 76 (Old Bonsall Bridge)]
Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52109, Zinc	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	76219
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52109, Zinc	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	76220
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	44297	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	7348
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All fifteen samples exceed the water quality objective according to results in the San Diego County Municipal Copermittees Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Water Quality Control Plan for the San Diego Basin Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Oceanside, under the Benet Road Bridge, north of Highway 76.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	7355
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirteen of fifteen samples exceed the water quality objective according to the results in San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Water Quality Control Plan for the San Diego Basin Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Oceanside, under the Benet Road Bridge, north of Highway 76.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	76296
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west

Data Reference:	of Interstate 15) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin. Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	76204
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there

is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:

The samples were collected at stations 903SLR-MLS and 903SLR-TWAS-1, San Luis Rey River.

Temporal Representation:

The samples were collected from 2001 to 2008.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID: 23503

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 15

Number of Exceedances: 3

Data and Information Type: Ambient toxicity testing (chronic)

Data Used to Assess Water Quality: Selenastrum capricornutum-
One of fifteen samples collected were found to be toxic as determined by the Selenastrum capricornutum growth test, Ceriodaphnia dubia survival/reproductive test.

Ceriodaphnia dubia-

Two of fifteen samples collected were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test.

Hyalella azteca -

None of the fifteen samples collected were found to be toxic as determined by the Hyalella azteca survival test according to results in the San Diego County Municipal Copermittees Report, 2007.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.

Guideline Reference: [Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001](#)

Spatial Representation: Samples were collected at mass loading station under the Benet Rd bridge north of highway 76 on the San Luis Rey River.

Temporal Representation: Samples were collected at from 2001 through 2006

Environmental Conditions:

QAPP Information: Samples were collected in compliance with Weston's quality assurance plan.

QAPP Information Reference(s): [Weston Solutions, 2004. Quality Management Manual. March 2004 \(Revised December 2009\).](#)

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID: 21182

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Three water samples were collected at San Luis Rey River station 903SLSLR2 May 2004, September 2004, March 2005, and April 2005. Two of three samples showed excessive selenium concentrations but one sample was "estimated" according to results in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007). CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Water samples were collected at San Luis Rey River station 903SLSLR2.
Temporal Representation: Samples were collected on May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID: 7493

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 3

Data and Information Type: Ambient toxicity testing (chronic)
Data Used to Assess Water Quality: Selenastrum capricornutum-

Eight samples were collected and three samples show significant toxicity levels (SL) as determined by the *Selenastrum capricornutum* growth test.

Ceriodaphnia dubia-

Eight samples were collected and two samples show significant toxicity levels (SL) as determined by the *Ceriodaphnia dubia* survival/reproductive test.

Hyalella azteca-

Eight samples were collected and none show significant toxicity levels (SL) as determined by at least one of the *Hyalella azteca* survival/growth test according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, September 13-14, 2004, March 1-2, April 18 and April 20, 2005.

Data Reference:

[Urban Runoff Monitoring, Volume 1- Final Report](#)
[Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference:

[Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013](#)

Spatial Representation:

Samples were collected at monitoring station San Luis Rey River 2 and San Luis Rey River 8.

Temporal Representation:

Samples were collected at each site on the following four dates, May 18-19, September 13-14, 2004, March 1-2, April 18 and April 20, 2005.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:

7374

Pollutant:

Phosphorus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total

Beneficial Use:

Warm Freshwater Habitat

Number of Samples:

4

Number of Exceedances:

4

Data and Information Type:

Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality:

All four samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, 2004, September 13-14, 2004, March 1-2, 2005, April 18-20, 2005.

Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at San Luis Rey River 8 (station id: 903SLSLR8 lat/long: 33.21494/-117.36837), located on the main stem of the San Luis Rey River.
Temporal Representation:	Samples were collected at each site on the following four dates, May 18-19, 2004, September 13- 14, 2004, March 1- 2, 2005, April 18- 20, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third occurred between storm events and the fourth during high base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	76168
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was

	collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/8/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	76290
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 7.2. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at 903_SMC00153, San Luis Rey River, lower.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	79486
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Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	24
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Of 28 total samples collected at 5 stations, 24 had scores below the 0.79 threshold, and therefore are exceeding the water quality objective for the aquatic life beneficial use. 1 sample was flagged and not included due to low organism counts.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations 903SLRR-MLS SMC00153 903SLRR-MR 903SLR-TWAS-1 SMC01717
Temporal Representation:	The samples were from 2001 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan and the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	81137
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 0. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at 903_SMC01717, San Luis Rey River, Couser Cyn Rd.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	72766
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	26
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty-six of the 26 samples collected had IBI scores below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference:

[Development of a Benthic Index of Biotic Integrity \(B-IBI\) for Wadeable Streams in Northern Coastal California and its Application to Regional 305\(b\) Assessment](#)

Spatial Representation:

The samples were collected at stations SLRR-MR and SLR-TWAS-2, 903SLR-MLS, 903SLRR-BR, and 903SLR-TWAS-1 San Luis Rey River.

Temporal Representation:

The samples were collected twice a year in May and October from 2001 to 2008.

Environmental Conditions:

QAPP Information:

The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.

QAPP Information Reference(s):

[Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.](#)

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID: 27028

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 37
Number of Exceedances: 37

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Thirty-seven samples of IBI data were taken from May 1998 to May 2007 at two sampling sites. Of the total number of samples, all thirty-seven of the samples exceeded the IBI impairment threshold.

Data Reference: [Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams.](#)

Spatial Representation:	Samples were collected at four sites: SLRR-BR, SLRR-MR, SLRRFR, and SLR6xx on San Luis Rey River.
Temporal Representation:	Sampling occurred annually over an eight year period from May 1998 to October 2006 and during May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 44297, Benthic Community Effects
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID:	23502
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of eight samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, 2004, September 13-14, 2004, March 1-2, 2005, April 18- 20, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at monitoring station San Luis Rey River 8 (station id: 903SLSLR8 lat/long: 33.21494/-117.36837).
Temporal Representation:	Samples were collected at each site on the following four dates, May 18-19, 2004, September 13-14, 2004, March 1-2, 2005, April 18- 20, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third sample occurred between storm events and the fourth during high base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 49041
San Luis Rey River, Lower (west of Interstate 15)

Region 9

Pollutant: Bifenthrin
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2029
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Four of the four samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49041, Bifenthrin
San Luis Rey River, Lower (west of Interstate 15)

Region 9

LOE ID: 78131

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Luis Rey River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Luis Rey River was collected at 1 monitoring site [San Luis Rey River, lower - 903_SMC00153]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 49041, Bifenthrin

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	76296
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Lower (west of Interstate 15) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Lower (west of Interstate 15) was collected at 2 monitoring sites [San Luis Rey River - 903SLR-MLS, San Luis Rey River - 903SLR-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup

QAPP Information Reference(s):

DECISION ID	43141	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 one line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. All four of the samples exceed the water quality objective.

According to Table 3.2 of the Listing Policy the minimum sample requirement is five.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All four samples exceeded the sulfate water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43141, Sulfates	Region 9
San Luis Rey River, Lower (west of Interstate 15)	

LOE ID:	23500
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight water samples were collected at San Luis Rey River station 903SLSLR8 on May 2004, September 2004, March 2005, and April 2005. All four samples showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Luis Rey River station 903SLSLR8.
Temporal Representation:	Samples were collected on May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	34482	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Chloride
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34482, Chloride		Region 9
San Luis Rey River, Lower (west of Interstate 15)		

LOE ID:	4728
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	43658	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Eighteen of the 23 samples exceed the water quality objective for total nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of 23 samples exceed the total nitrogen water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 43658, Nitrogen	Region 9
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San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	7355
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirteen of fifteen samples exceed the water quality objective according to the results in San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Water Quality Control Plan for the San Diego Basin Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Oceanside, under the Benet Road Bridge, north of Highway 76.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43658, Nitrogen**Region 9****San Luis Rey River, Lower (west of Interstate 15)**

LOE ID:	23502
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of eight samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, 2004, September 13-14, 2004, March 1-2, 2005, April 18- 20, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at monitoring station San Luis Rey River 8 (station id: 903SLSLR8 lat/long: 33.21494/-117.36837).
Temporal Representation:	Samples were collected at each site on the following four dates, May 18-19, 2004, September 13-14, 2004, March 1-2, 2005, April 18- 20, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third sample occurred between storm events and the fourth during high base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey. CA

DECISION ID	37416	Region 9
San Luis Rey River, Lower (west of Interstate 15)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. All of the 19 samples exceed the water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All 19 samples exceed the phosphorus water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37416, Phosphorus

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	7348
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All fifteen samples exceed the water quality objective according to results in the San Diego County Municipal Copermittees Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Water Quality Control Plan for the San Diego Basin Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Oceanside, under the Benet Road Bridge, north of Highway 76.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37416, Phosphorus

Region 9

San Luis Rey River, Lower (west of Interstate 15)

LOE ID:	7374
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, 2004, September 13- 14, 2004, March 1- 2, 2005, April 18-20, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at San Luis Rey River 8 (station id: 903SLSLR8 lat/long: 33.21494/-117.36837), located on the main stem of the San Luis Rey River.
Temporal Representation:	Samples were collected at each site on the following four dates, May 18-19, 2004, September 13- 14, 2004, March 1- 2, 2005, April 18- 20, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third occurred between storm events and the fourth during high base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 34548		Region 9
San Luis Rey River, Lower (west of Interstate 15)		
Pollutant:	Total Dissolved Solids	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.	
	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.	

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34548, Total Dissolved Solids
San Luis Rey River, Lower (west of Interstate 15)**

Region 9

LOE ID:	4729
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Loma Alta Creek](#)
Water Body ID: CAR9041000019991117145300
Water Body Type: River & Stream

DECISION ID	43254	Region 9
Loma Alta Creek		

Pollutant: Selenium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the Eight samples exceed the water quality criteria for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the Eight samples exceed the CTR value for Se and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43254, Selenium	Region 9
Loma Alta Creek	

LOE ID: 21384
Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Loma Alta Creek station 3, 904CBLAC3 from March 2002 to September 2002. The tests showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - All four samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - three of the four samples exhibited toxicity. Toxicity testing was part of California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Loma Alta Creek station 3 (904CBLAC3). (Latitude 33.2000, Longitude -117.3306).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43254, Selenium

Region 9

Loma Alta Creek

LOE ID:	74143
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Four of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of Hyalella azteca, reproduction of Ceriodaphnia dubia, and growth of Selenastrum capricornutum.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 904LAC-TWAS-1 Loma Alta Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43254, Selenium
Loma Alta Creek

Region 9

LOE ID:	8875
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Loma Alta Creek station 904CBLAC3 on March, April, June and September 2002. All samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Loma Alta Creek station 3 904CBLAC3; (Latitude 33.2000659, Longitude -117.330675).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43254, Selenium
Loma Alta Creek

Region 9

LOE ID:	77791
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Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	43222	Region 9
Loma Alta Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>Seven lines of evidence are available in the administrative record to assess this pollutant. Eight out of Eight samples exhibited water toxicity, and Two out of Four samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight out of Eight samples exhibited water toxicity, and Two out of Four samples exhibited sediment toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, this water body is also impaired for water concentrations of Bifenthrin and Selenium and has also exhibited signs of biological population and community degradation.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43222, Toxicity

Region 9

Loma Alta Creek

LOE ID:	74148
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Loma Alta Creek

LOE ID:	26415
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven samples of IBI data were taken from May 1998 to November 2000 at two sampling sites. All 11 samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 904LACECR and 904LACCBx on Loma Alta Creek.
Temporal Representation:	Sampling occurred during two to three events from May 1998 to November 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring and Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Loma Alta Creek

LOE ID:	79488
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight of the eight samples collected were below the 0.79 threshold, and are therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations 904LAC-TWAS-1, LAC-CB, and LAC-ECR on Loma Alta Creek.
Temporal Representation:	The samples were collected in May and October 2001 to 2002 and in May 2008 and 2008.
Environmental Conditions:	
QAPP Information:	County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43222, Toxicity
Loma Alta Creek

Region 9

LOE ID:	26722
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples of IBI data were taken from May 2001 to October 2002 at two sampling sites. All seven of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: LAC-CB and LAC-ECR on Loma Alta Creek.
Temporal Representation:	Sampling occurred during May and October in 2001 and 2002.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43222, Toxicity

Region 9

Loma Alta Creek

LOE ID:	21384
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Loma Alta Creek station 3, 904CBLAC3 from March 2002 to September 2002. The tests showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - All four samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - three of the four samples exhibited toxicity. Toxicity testing was part of California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Monitoring data for Region 9](#)

Spatial Representation: Water Toxicity Samples were collected at Loma Alta Creek station 3 (904CBLAC3). (Latitude 33.2000, Longitude -117.3306).

Temporal Representation: Samples were collected on March, April, June and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43222, Toxicity

Region 9

Loma Alta Creek

LOE ID: 8875

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3

Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality: Four water samples were collected at Loma Alta Creek station 904CBLAC3 on March, April, June and September 2002. All samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).

Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Water samples were collected at Loma Alta Creek station 3 904CBLAC3; (Latitude 33.2000659, Longitude -117.330675).

Temporal Representation: Samples were collected on March, April, June and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43222, Toxicity

Region 9

Loma Alta Creek

LOE ID: 74143

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Four of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , reproduction of <i>Ceriodaphnia dubia</i> , and growth of <i>Selenastrum capricornutum</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 904LAC-TWAS-1 Loma Alta Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43222, Toxicity

Region 9

Loma Alta Creek

LOE ID:	26774
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Loma Alta Creek station 3, 904CBLAC3 from March 2002 to September 2002. The tests showed significant toxicity levels (SL) in the following tests: <i>Hyalella azteca</i> - Two of the four samples exhibited toxicity. Toxicity testing was part of California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Loma Alta Creek station 3 (904CBLAC3). (Latitude 33.2000, Longitude -117.3306).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	49263	Region 9
Loma Alta Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Four samples exceeded the Water Quality Criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49263, Arsenic	Region 9
Loma Alta Creek	

LOE ID:	74145
Pollutant:	Arsenic

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49266	Region 9
Loma Alta Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. [NUMBER] of the [NUMBER] samples exceed the [OBJECTIVE/GUIDELINE/CRITERIA].</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [NUMBER] of [NUMBER] samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of ____ samples is needed to determine if a beneficial use is fully supported using table ____.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 49266, Cadmium
Loma Alta Creek**

Region 9

LOE ID:	74149
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID
Loma Alta Creek**

49397

Region 9

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49397, Chlorpyrifos Loma Alta Creek

Region 9

LOE ID:	77789
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are

Objective/Criterion Reference:	harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49399	Region 9
Loma Alta Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Chromium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Four samples exceeded the Water Quality Criteria for Chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49399, Chromium	Region 9
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Loma Alta Creek

LOE ID:	74151
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49400	Region 9
Loma Alta Creek		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Copper.	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49400, Copper

Region 9

Loma Alta Creek

LOE ID:	74152
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

DECISION ID	49401	Region 9
Loma Alta Creek		

Pollutant: Cypermethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Cypermethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49401, Cypermethrin	Region 9
Loma Alta Creek	

LOE ID: 74154

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: The reporting limit of the assessment used for these samples is greater than the objective for this pollutant, and therefore both of the samples had to be thrown out in accordance with section 6.1.5.5 of the Listing Policy. Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 0

Data Reference:	<p>samples exceed the criterion for Cypermethrin, total.</p> <p>Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49402	Region 9
Loma Alta Creek		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Deltamethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Deltamethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49402, Deltamethrin
Loma Alta Creek**

Region 9

LOE ID:	74155
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID 49405
Loma Alta Creek**

Region 9

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49405, Diazinon**Region 9****Loma Alta Creek**

LOE ID: 74157

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]

Temporal Representation: Data was collected over the time period 9/19/2007-5/14/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	49406	Region 9
Loma Alta Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Evaluation Guideline for Esfenvalerate/Fenvalerate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Evaluation Guideline for Esfenvalerate/Fenvalerate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49406, Esfenvalerate/Fenvalerate	Region 9
Loma Alta Creek	

LOE ID:	74158
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49407	Region 9
Loma Alta Creek		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of Four samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49407, Lead
Loma Alta Creek**

Region 9

LOE ID:	74159
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID 49408
Loma Alta Creek**

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the Four samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Four samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49408, Malathion

Region 9

Loma Alta Creek

LOE ID:	74160
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are

Objective/Criterion Reference:	harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49409	Region 9
Loma Alta Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49409, Nickel	Region 9
Loma Alta Creek	

LOE ID:	74161
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 49410		Region 9
Loma Alta Creek		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>	

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49410, Zinc

Region 9

Loma Alta Creek

LOE ID:	74144
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Loma Alta Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	44526	Region 9
Loma Alta Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Contaminated Sediments Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects	Region 9
Loma Alta Creek	

LOE ID:	26722
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples of IBI data were taken from May 2001 to October 2002 at two sampling sites. All seven of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: LAC-CB and LAC-ECR on Loma Alta Creek.
Temporal Representation:	Sampling occurred during May and October in 2001 and 2002.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects

Region 9

Loma Alta Creek

LOE ID:	72763
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight of the eight samples collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired

Guideline Reference:	conditions. Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at stations 904LAC-TWAS-1, LAC-CB, and LAC-ECR on Loma Alta Creek.
Temporal Representation:	The samples were collected in May and October 2001 to 2002 and in May 2008 and 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects

Region 9

Loma Alta Creek

LOE ID:	26415
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven samples of IBI data were taken from May 1998 to November 2000 at two sampling sites. All 11 samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 904LACECR and 904LACCBx on Loma Alta Creek.
Temporal Representation:	Sampling occurred during two to three events from May 1998 to November 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects**Region 9****Loma Alta Creek**

LOE ID:	8875
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Loma Alta Creek station 904CBLAC3 on March, April, June and September 2002. All samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Loma Alta Creek station 3 904CBLAC3; (Latitude 33.2000659, Longitude -117.330675).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects**Region 9****Loma Alta Creek**

LOE ID:	26774
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Loma Alta Creek station 3, 904CBLAC3 from March 2002 to September 2002. The tests showed significant toxicity levels (SL) in the following tests: Hyalella azteca - Two of the four samples exhibited toxicity. Toxicity testing was part of

Data Reference:	California's Surface Water Ambient Monitoring Program Report, 2007. Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Loma Alta Creek station 3 (904CBLAC3). (Latitude 33.2000, Longitude -117.3306).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects

Region 9

Loma Alta Creek

LOE ID:	74148
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects
Loma Alta Creek

Region 9

LOE ID:	74143
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Four of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , reproduction of <i>Ceriodaphnia dubia</i> , and growth of <i>Selenastrum capricornutum</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 904LAC-TWAS-1 Loma Alta Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects
Loma Alta Creek

Region 9

LOE ID:	79488
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight of the eight samples collected were below the 0.79 threshold, and are therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations 904LAC-TWAS-1, LAC-CB, and LAC-ECR on Loma Alta Creek.
Temporal Representation:	The samples were collected in May and October 2001 to 2002 and in May 2008 and 2008.
Environmental Conditions:	
QAPP Information:	County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects

Region 9

Loma Alta Creek

LOE ID:	3169
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys

Data Used to Assess Water Quality:	Data was collected for the San Diego Regional Water Quality Control Board: 1999 Biological Assessment Report. Samples were collected at one location (near College Blvd) in Loma Alta Creek. Samples were collected from May 1998-May 1999. Bioassessment metrics were used to describe characteristics of the macroinvertebrate community. Physical habitat quality scores were given. The Loma Alta Creek site scored lower relative to other creeks in the region. BMI ranking scores were also given to each sample location for each sampling event. In all four sampling events, the BMI ranking for Loma Alta Creek was below average compared to the other creeks in the region. In 3 out of 4 events, it received a score of poor. (SDRWQCB, 1999a)
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected along Loma Alta Creek at 5 riffles downstream of College Blvd.
Temporal Representation:	Samples were collected in May 1998, September 1998, November 1998, and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44526, Benthic Community Effects

Region 9

Loma Alta Creek

LOE ID:	21384
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Loma Alta Creek station 3, 904CBLAC3 from March 2002 to September 2002. The tests showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - All four samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - three of the four samples exhibited toxicity. Toxicity testing was part of California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9

Spatial Representation:	Water Toxicity Samples were collected at Loma Alta Creek station 3 (904CBLAC3). (Latitude 33.2000, Longitude -117.3306).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	49396	Region 9
Loma Alta Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the Two samples exceed the Water Quality Criteria for Bifenthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of Two samples exceed the Water Quality Criteria for Bifenthrin and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49396, Bifenthrin	Region 9
Loma Alta Creek	

LOE ID:	74148
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Loma Alta Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Loma Alta Creek was collected at 1 monitoring site [Loma Alta Creek - 904LAC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49396, Bifenthrin

Region 9

Loma Alta Creek

LOE ID:	21384
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Loma Alta Creek station 3, 904CBLAC3 from March 2002 to September 2002. The tests showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - All four samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - three of the four samples exhibited toxicity. Toxicity testing was part of California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of

Objective/Criterion Reference:	species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Loma Alta Creek station 3 (904CBLAC3). (Latitude 33.2000, Longitude -117.3306).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 49396, Bifenthrin

Region 9

Loma Alta Creek

LOE ID:	74143
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Four of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , reproduction of <i>Ceriodaphnia dubia</i> , and growth of <i>Selenastrum capricornutum</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 904LAC-TWAS-1 Loma Alta Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 2 samples were in exceedance of the water quality objective and the sample size is insufficient to determine if standards are being met or exceeded with the confidence and power of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32439, Total Dissolved Solids	Region 9
Loma Alta Creek	

LOE ID:	3167
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two samples were collected by the Regional Board on 5/20/1998 at two locations on Loma Alta Creek. Both samples exceeded the water quality objective.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for total dissolved solids is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Two samples were taken along Loma Alta Creek; one at College Blvd. and one at El Camino Real.

Temporal Representation: One sample was taken at each of the two locations on one day, 5/20/1998.

Environmental Conditions:

QAPP Information: Data was used in the 2002 assessment.

QAPP Information Reference(s):

DECISION ID	32888	Region 9
Loma Alta Creek		

Pollutant: Turbidity

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status: Original

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of two samples exceed the water quality objective.

Application of table 3.2 of the Listing Policy requires a minimum of five samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 2 samples exceeded the Basin Plan criteria, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32888, Turbidity	Region 9
Loma Alta Creek	

LOE ID: 3168

Pollutant: Turbidity

LOE Subgroup: Adverse Biological Responses

Matrix: -N/A

Fraction: Dissolved

Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Samples were collected by RWQCB9 at two locations on Loma Alta Creek on 5/20/1998. No samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for Turbidity is 20 NTU. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Two samples, one at each location, were collected along Loma Alta Creek at College Blvd. and El Camino Real.
Temporal Representation:	Samples were collected once on 5/20/1998
Environmental Conditions:	
QAPP Information:	Dataset was used in 2002's assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Buena Vista Creek](#)
Water Body ID: CAR9042100020011025103123
Water Body Type: River & Stream

DECISION ID	42422	Region 9
Buena Vista Creek		

Pollutant: Selenium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. Four of Eight samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of eight samples exceed the criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42422, Selenium	Region 9
Buena Vista Creek	

LOE ID: 77985
Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 42422, Selenium

Region 9

Buena Vista Creek

LOE ID:	6549
Pollutant:	Selenium
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected at Buena Vista Creek show excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000.)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule, 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA

Spatial Representation:	Water samples were collected at Buena Vista Creek station 904CBBVR4; (Latitude 33.180577, Longitude -117.339035).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 42422, Selenium

Region 9

Buena Vista Creek

LOE ID:	73077
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Two of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 904BVC-TWAS-1 Buena Vista Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01).
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID

48044

Region 9

Buena Vista Creek

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48044, Arsenic
Buena Vista Creek

Region 9

LOE ID:	77983
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	48045	Region 9
Buena Vista Creek		

Pollutant: Cadmium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48045, Cadmium	Region 9
Buena Vista Creek	

LOE ID: 77984

Pollutant: Cadmium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48080	Region 9
Buena Vista Creek		
Pollutant:	Chlorpyrifos	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the	

Line of Evidence (LOE) for Decision ID 48080, Chlorpyrifos**Region 9****Buena Vista Creek**

LOE ID:	77716
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID**48081****Region 9****Buena Vista Creek**

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48081, Chromium**Region 9****Buena Vista Creek**

LOE ID: 73067

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chromium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]

Temporal Representation: Data was collected over the time period 9/19/2007-5/14/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	48082	Region 9
Buena Vista Creek		

Pollutant: Copper

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48082, Copper	Region 9
Buena Vista Creek	

LOE ID: 73068

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48106	Region 9
Buena Vista Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48106, Cypermethrin

Region 9

Buena Vista Creek

LOE ID:	73069
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

48107

Region 9

Buena Vista Creek

Pollutant:

Deltamethrin

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48107, Deltamethrin
Buena Vista Creek

Region 9

LOE ID: 73070

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48084	Region 9
Buena Vista Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48084, Diazinon	Region 9
Buena Vista Creek	

LOE ID:	73071
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48117	Region 9
Buena Vista Creek		
Pollutant:	Esfenvalerate/Fenvalerate	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>	

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48117, Esfenvalerate/Fenvalerate Buena Vista Creek

Region 9

LOE ID:	73072
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

48101

Region 9

Buena Vista Creek

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48101, Lead

Region 9

Buena Vista Creek

LOE ID:	73073
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.

Objective/Criterion Reference: Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]

Temporal Representation: Data was collected over the time period 9/19/2007-5/14/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	48102	Region 9
Buena Vista Creek		

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48102, Malathion	Region 9
Buena Vista Creek	

LOE ID: 73074

Pollutant: Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48104	Region 9
Buena Vista Creek		
Pollutant:	Nickel	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48104, Nickel
Buena Vista Creek**

Region 9

LOE ID:	73075
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48105, Zinc	Region 9
Buena Vista Creek	

LOE ID: 73078
Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Buena Vista Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to

Objective/Criterion Reference:	protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/19/2007-5/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	43878	Region 9
Buena Vista Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects	Region 9
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Buena Vista Creek

LOE ID:	26376
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven samples of IBI data were taken from May 1998 to November 2000 at two sampling sites. Of the total number of samples, all eleven samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 904BVRVSW and 904BVREDx on Buena Vista Creek.
Temporal Representation:	Sampling occurred during two to four events annually over a three year period from May 1998 to November 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID:	21371
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum Capricornutum Three of the four samples collected show significant toxicity levels (SL) as determined by the following tests Selenastrum Capricornutum growth test. Ceriodaphnia dubia One of the four samples collected show significant toxicity levels (SL) as determined by the following tests Ceriodaphnia dubia survival/reproductive test according to results in California's Surface Water Ambient Monitoring Program, 2007. Samples were collected on March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Samples were collected at Buena Vista Creek station (904CBBVR4). (Latitude 33.1805, Longitude -117.3289).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID:	73077
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Two of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of Hyalella azteca.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 904BVC-TWAS-1 Buena Vista Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID:	72798
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven of the eleven samples collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at three stations on Buena Vista Creek. The stations are 904BVC-TWAS-1 or BVR-ED, BVR-CB, and BVR-SVW.
Temporal Representation:	The samples were collected in May and October from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring

QAPP Information Reference(s): Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
[Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.](#)

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID: 26278

Pollutant: Sediment Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 4

Data and Information Type: Ambient toxicity testing (chronic)
Data Used to Assess Water Quality: Hyalella azteca
All four samples collected show significant toxicity levels (SL) as determined by the following tests Hyalella azteca survival and growth test according to results in California's Surface Water Ambient Monitoring Program, 2007. Samples were collected on March, April, June and September 2002.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013](#)

Spatial Representation: Samples were collected at Buena Vista Creek station (904CBBVR4). (Latitude 33.1805, Longitude -117.3289).

Temporal Representation: Samples were collected on March, April, June and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID: 26628

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Ten samples were taken from May 2001 to October 2006 at three sampling sites. All 10 samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at three sites: BVR-CB, BVR-ED, and BVR-SVW on Buena Vista Creek.
Temporal Representation:	Sampling occurred during May and October in 2001 and 2002, then in October of 2003, 2004 and 2006.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID:	79494
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Of ten samples collected at three stations, six were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference:

[The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation:

The samples were collected at three stations on Buena Vista Creek. 904BVR-SVW 904BVC-TWAS-1 904BVR-CB

Temporal Representation:

The samples were collected in May and October from 2001 to 2008.

Environmental Conditions:

QAPP Information:

The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.

QAPP Information Reference(s):

[Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.](#)

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID:

3174

Pollutant:

Benthic-Macroinvertebrate Bioassessments

LOE Subgroup:

Population/Community Degradation

Matrix:

Not Specified

Fraction:

None

Beneficial Use:

Agricultural Supply

Number of Samples:

0

Number of Exceedances:

0

Data and Information Type:

Benthic macroinvertebrate surveys

Data Used to Assess Water Quality:

Data were collected in 1998 and 1999 at Buena Vista Creek for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores ranged from 59 to 80, relatively lower compared to other sampled waterbodies. BMI ranking scores were mostly below average, compared to other sampled waterbodies. (San Diego RWQCB, 1999a).

Data Reference:

[Placeholder reference 2006 303\(d\)](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

No objective.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Buena Vista Creek, 5 riffles upstream of South Vista Way (BVR-SVW). Lat/Long is N33E10' 48.7"/ W117E 19' 41.1"

Temporal Representation:

Samples were collected in May, September, and November 1998 and in May 1999.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID: 3175

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: Data were collected in 1998 and 1999 for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat assessment scores ranged from 44 to 68, relatively lower than for the other sampled watersheds. BMI ranking scores were mostly below average compared to other sampled watersheds. (San Diego RWQCB, 1999a).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No objective.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Buena Vista Creek, 5 riffles downstream of Santa Fe Avenue (BVR-ED). The Lat /Long is N33E11'57.9"/ W117E 14' 35.1"

Temporal Representation: Samples were collected in May, September, and November 1998 and May 1999.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID: 73065

Pollutant: Bifenthrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Bifenthrin.

Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects
Buena Vista Creek

Region 9

LOE ID:	3176
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. Note that all four samples actually had significant toxicity relative to the control, but only the two samples without any QA qualifiers were considered as exceedances (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: All samples were collected from one station, Buena Vista Creek 4.
Temporal Representation: Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 12, 2002 and September 16, 2002.
Environmental Conditions: San Diego County Coastal Stream: Buena Vista Creek, Hydrologic Unit Basin Number 904.21.
QAPP Information: SWAMP QAPP.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43878, Benthic Community Effects

Region 9

Buena Vista Creek

LOE ID: 6549

Pollutant: Selenium
LOE Subgroup: Pollution
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: All four samples collected at Buena Vista Creek show excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000.)
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA](#)

Spatial Representation: Water samples were collected at Buena Vista Creek station 904CBBVR4; (Latitude 33.180577, Longitude -117.339035).
Temporal Representation: Samples were collected in March, April, June and September 2002.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA](#)

DECISION ID

48042

Region 9

Buena Vista Creek

Pollutant: Bifenthrin
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion: 2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the two samples exceed the criteria. Two of four samples exhibited toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of two samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48042, Bifenthrin

Region 9

Buena Vista Creek

LOE ID:	73065
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Vista Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation: Data for this line of evidence for Buena Vista Creek was collected at 1 monitoring site [Buena Vista Creek - 904BVC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/30/2007-2/3/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 48042, Bifenthrin
Buena Vista Creek

Region 9

LOE ID: 73077

Pollutant: Toxicity
 LOE Subgroup: Toxicity
 Matrix: Water
 Fraction: None

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples: 4
 Number of Exceedances: 2

Data and Information Type: TOXICITY TESTING
 Data Used to Assess Water Quality: Four samples were collected to test for toxicity. Two of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of *Hyalella azteca*.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at station 904BVC-TWAS-1 Buena Vista Creek.
 Temporal Representation: The samples were collected from 2007 to 2008.
 Environmental Conditions:
 QAPP Information: The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01).
 QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

DECISION ID 33524
Buena Vista Creek

Region 9

Pollutant: Toxicity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)

Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.6 and 3.9 of the Listing Policy. Under section 3.6 and 3.9 a water segment can be placed on the 303(d) list if the water segment exhibits significant toxicity and the observed toxicity is associated with a pollutant or pollutants. The water body segment may also be listed for toxicity alone.

Three lines of evidence are available in the administrative record to assess this pollutant. Nine of the 12 samples exceed the Toxicity objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 12 samples exceed sediment toxicity criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33524, Toxicity

Region 9

Buena Vista Creek

LOE ID: 3176

Pollutant: Sediment Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 2

Data and Information Type: Toxicity testing of sediments
Data Used to Assess Water Quality: Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. Note that all four samples actually had significant toxicity relative to the control, but only the two samples without any QA qualifiers were considered as exceedances (SWAMP, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: All samples were collected from one station, Buena Vista Creek 4.

Temporal Representation: Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 12, 2002 and September 16, 2002.

Environmental Conditions: San Diego County Coastal Stream: Buena Vista Creek, Hydrologic Unit Basin Number 904.21.

QAPP Information: SWAMP QAPP.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33524, Toxicity
Buena Vista Creek

Region 9

LOE ID: 26278

Pollutant: Sediment Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4

Number of Exceedances: 4

Data and Information Type: Ambient toxicity testing (chronic)

Data Used to Assess Water Quality: Hyalella azteca
 All four samples collected show significant toxicity levels (SL) as determined by the following tests Hyalella azteca survival and growth test according to results in California's Surface Water Ambient Monitoring Program, 2007. Samples were collected on March, April, June and September 2002.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013](#)

Spatial Representation: Samples were collected at Buena Vista Creek station (904CBBVR4). (Latitude 33.1805, Longitude -117.3289).

Temporal Representation: Samples were collected on March, April, June and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 33524, Toxicity
Buena Vista Creek

Region 9

LOE ID:	73077
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Two of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 904BVC-TWAS-1 Buena Vista Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01).
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 33524, Toxicity

Region 9

Buena Vista Creek

LOE ID:	21371
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p><i>Selenastrum Capricornutum</i></p> <p>Three of the four samples collected show significant toxicity levels (SL) as determined by the following tests <i>Selenastrum Capricornutum</i> growth test.</p> <p><i>Ceriodaphnia dubia</i></p> <p>One of the four samples collected show significant toxicity levels (SL) as determined by the following tests <i>Ceriodaphnia dubia</i> survival/reproductive test according to results in California's Surface Water Ambient Monitoring Program, 2007. Samples were collected on</p>

Data Reference:	March, April, June and September 2002. Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Samples were collected at Buena Vista Creek station (904CBBVR4). (Latitude 33.1805, Longitude -117.3289).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	33981	Region 9
Buena Vista Creek		
Pollutant:	Chloride	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The single sample exceeds the Basin Plan water quality objective for chloride.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceeds the Basin Plan water quality objective for chloride. A minimum of two samples is needed to determine if the water quality objective is exceeded according to Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.	

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33981, Chloride

Region 9

Buena Vista Creek

LOE ID: 3172

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Agricultural Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 1998. One sample was collected and it was in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Buena Vista Creek. Exact location was not reported.
Temporal Representation: Samples were collected on 06/29/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

33593

Region 9

Buena Vista Creek

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A single sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Only one sample exceeded the water quality objective for sulfate. More data is needed to determine if the water quality objective is exceeded.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33593, Sulfates
Buena Vista Creek**

Region 9

LOE ID:	3173
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Tissue
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and it was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Buena Vista Creek. Exact location was not reported.
Temporal Representation:	Samples were collected on 06/29/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33718
Buena Vista Creek**

Region 9

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or Pollution:

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 and 3.9 of the Listing Policy. Under section 3.2 and 3.9 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. An insufficient number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does not satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 2 samples were in exceedance of the water quality objective for total dissolved solids and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33718, Total Dissolved Solids
Buena Vista Creek

Region 9

LOE ID: 3170

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Agricultural Supply

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 1998. Two of 2 samples were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for total dissolved solids is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: One set of samples were collected at Buena Vista Creek at South Vista Way. The other set

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

were collected at Buena Vista Creek; exact location was not reported.
Samples were collected once on 05/20/1998 and once on 06/29/1998.

Data used in 2002 assessment.

DECISION ID	34057	Region 9
Buena Vista Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.

Application of table 3.2 for a conventional pollutant requires a minimum of five samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 2 samples were in exceedance of the water quality objective for turbidity and this does not satisfy the sample size requirement in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34057, Turbidity	Region 9
Buena Vista Creek	

LOE ID:	3171
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Turbidity is 20 ntu. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One set of samples were collected at Buena Vista Creek at South Vista Way. The second set of samples were collected at Buena Vista Creek; exact location was not reported.
Temporal Representation:	Samples were collected once on 05/20/1998 and once on 06/29/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Agua Hedionda Creek](#)
Water Body ID: CAR9043100020010924145051
Water Body Type: River & Stream

DECISION ID	33134	Region 9
Agua Hedionda Creek		

Pollutant: Selenium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Four of the 29 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 29 samples exceed the objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33134, Selenium	Region 9
Agua Hedionda Creek	

LOE ID: 77975
Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Selenium. Two samples of which RLs were not reported and the results were "ND" were not included in the assessment.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33134, Selenium

Region 9

Agua Hedionda Creek

LOE ID:	77976
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for selenium is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33134, Selenium

Region 9

Agua Hedionda Creek

LOE ID:	3183
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, three samples exceeding The CTR criteria (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 µg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at one station in Agua Hedionda Creek No. 33.14887 -117.29758.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Agua Hedionda Creek, Part of the San Diego Coastal Streams: Hydrologic Unit Basin Number 4.31
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID

42896

Region 9

Agua Hedionda Creek

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess pollutant. Thirty-nine of the 46 samples exceed the water quality objective for Toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-nine of the 46 samples exceed the water quality objective for Toxicity and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.</p>

Line of Evidence (LOE) for Decision ID 42896, Toxicity		Region 9
Agua Hedionda Creek		
LOE ID:	26225	
Pollutant:	Sediment Toxicity	
LOE Subgroup:	Toxicity	
Matrix:	Sediment	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	4	
Number of Exceedances:	4	
Data and Information Type:	Toxicity testing of sediments	
Data Used to Assess Water Quality:	<p>Hyalella azteca-</p> <p>All four samples show significant toxicity levels (SL) as determined by the Hyalella azteca survival and growth test according to results in California's Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected one to three times a year from 2002-2006.</p>	
Data Reference:	Monitoring data for Region 9	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code A'SLÀ') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.	
Guideline Reference:	Monitoring data for Region 9	
Spatial Representation:	Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).	
Temporal Representation:	Samples were collected one to three times a year from 2002-2006.	

Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42896, Toxicity

Region 9

Agua Hedionda Creek

LOE ID:	72894
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 904CBAHC6.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42896, Toxicity

Region 9

Agua Hedionda Creek

LOE ID:	7475
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- All four samples show significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test. Ceriodaphnia dubia- All four samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival and reproduction test according to results in California's Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected one to three times a year from 2002-2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code Â'SLÂ') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9 Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).
Temporal Representation:	Samples were collected one to three times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42896, Toxicity

Region 9

Agua Hedionda Creek

LOE ID:	25001
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- None of fifteen samples collected were found to be toxic as determined by the Selenastrum capricornutum growth test. Ceriodaphnia dubia-

Three of fifteen samples collected were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test.

Hyaella Azteca-

Seven of fifteen samples collected were found to be toxic as determined by the Hyaella azteca survival test according to the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2002-2006.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (U.S. EPA, 2002).

Guideline Reference: [Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013](#)
[Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.

Temporal Representation: Samples were collected one to three times a year from 2002-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: Quality control for the toxicity portion of this study was conducted in accordance with the City of San Diego's NPDES program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42896, Toxicity

Region 9

Agua Hedionda Creek

LOE ID: 72893

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 27

Number of Exceedances: 17

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Twenty-seven samples were collected to test for toxicity. Seventeen of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of Hyaella azteca, growth of Selenastrum capricornutum and survival and reproduction of Ceriodaphnia dubia.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 904AHC-MLS and 904AHC-TWAS-1, Agua Hedionda Creek
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47426	Region 9
Agua Hedionda Creek		
Pollutant:	Anthracene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded	

Line of Evidence (LOE) for Decision ID 47426, Anthracene	Region 9
Agua Hedionda Creek	

LOE ID: 72849

Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	47462	Region 9
Agua Hedionda Creek		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 28 samples exceed the water quality objective for the protection of Municipal Drinking Water Supply.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 28 samples exceed the water quality objective for the protection of Municipal Drinking Water

Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47462, Antimony

Region 9

Agua Hedionda Creek

LOE ID:	77968
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for antimony is .006 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47425

Region 9

Agua Hedionda Creek

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 28 samples exceed the water quality objective for Municipal drinking supply, 0 of 28 for WARM Freshwater Aquatic life in water, and 0 of 1 for WARM Freshwater Aquatic life in sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 28 samples exceed the water quality objective for Municipal drinking supply, 0 of 28 for WARM Freshwater Aquatic life in water, and 0 of 1 for WARM Freshwater Aquatic life in sediment and these do not exceed the allowable frequencies listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47425, Arsenic**Region 9****Agua Hedionda Creek**

LOE ID:	77969
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]

Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47425, Arsenic

Region 9

Agua Hedionda Creek

LOE ID:	77970
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47425, Arsenic

Region 9

Agua Hedionda Creek

LOE ID:	72850
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47427	Region 9
Agua Hedionda Creek		

Pollutant:	Benzo(a)anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47427, Benzo(a)anthracene

Region 9

Agua Hedionda Creek

LOE ID:	72841
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

47428

Region 9

Agua Hedionda Creek

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 1 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47428, Benzo(a)pyrene (3,4-Benzopyrene -7-d)		Region 9
Agua Hedionda Creek		
LOE ID:	72842	
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.	
Data Reference:	Statewide Stream Pollution Trends Study 2008	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)	
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31	

Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	47431	Region 9
Agua Hedionda Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. One of 55 samples exceed the objective for WARM freshwater aquatic life and 0 of 28 samples exceed the objective for municipal drinking water supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 55 samples exceed the objective for WARM freshwater aquatic life and 0 of 28 samples exceed the objective for municipal drinking water supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47431, Cadmium	Region 9
Agua Hedionda Creek	

LOE ID:	72846
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47431, Cadmium
Agua Hedionda Creek

Region 9

LOE ID:	26225
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	Hyalella azteca- All four samples show significant toxicity levels (SL) as determined by the Hyalella azteca survival and growth test according to results in California's Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected one to three times a year from 2002-2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when

statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Monitoring data for Region 9](#)

Spatial Representation: Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).

Temporal Representation: Samples were collected one to three times a year from 2002-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 47431, Cadmium

Region 9

Agua Hedionda Creek

LOE ID: 77967

Pollutant: Cadmium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 28

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Cadmium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]

Temporal Representation: Data was collected over the time period 2/17/2002-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47431, Cadmium

Region 9

Agua Hedionda Creek

LOE ID: 77966

Pollutant: Cadmium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47431, Cadmium

Region 9

Agua Hedionda Creek

LOE ID:	72845
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47432 Region 9	
Agua Hedionda Creek	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Chlordane Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47432, Chlordane Region 9	
Agua Hedionda Creek	

LOE ID: 72829

Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 904CBAHC6 (Agua Hedionda Creek 6).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47439	Region 9
Agua Hedionda Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 26 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 26 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47439, Chromium

Region 9

Agua Hedionda Creek

LOE ID:	72857
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47439, Chromium

Region 9

Agua Hedionda Creek

LOE ID:	72858
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47440	Region 9
Agua Hedionda Creek		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to
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determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47440, Chrysene (C1-C4)

Region 9

Agua Hedionda Creek

LOE ID:	72859
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47441

Region 9

Agua Hedionda Creek

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 28 samples exceed the water quality objective for the protection of the municipal drinking supply beneficial use and 1 of 26 samples exceed the water quality objective for the protection of the WARM freshwater aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 28 samples exceed the water quality objective for the protection of the municipal drinking supply beneficial use and 1 of 26 samples exceed the water quality objective for the protection of the WARM freshwater aquatic life beneficial use and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47441, Copper
Agua Hedionda Creek

Region 9

LOE ID: 72860

Pollutant: Copper
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47441, Copper

Region 9

Agua Hedionda Creek

LOE ID:	72861
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47441, Copper

Region 9

Agua Hedionda Creek

LOE ID:	77974
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47443	Region 9
Agua Hedionda Creek		
Pollutant:	Cyfluthrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 	

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47443, Cyfluthrin
Agua Hedionda Creek**

Region 9

LOE ID:	72862
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47446
Agua Hedionda Creek

Region 9

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47446, Cyhalothrin, Lambda Agua Hedionda Creek

Region 9

LOE ID:	72863
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA, State Water Resources Control Board, SWAMP, December 2002 (1st version)

DECISION ID	47449	Region 9
Agua Hedionda Creek		

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47449, DDD (Dichlorodiphenyldichloroethane)	Region 9
Agua Hedionda Creek	

LOE ID:	72866
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	47451	Region 9
Agua Hedionda Creek		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47451, DDT (Dichlorodiphenyltrichloroethane)	Region 9
Agua Hedionda Creek	

LOE ID:	72892
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47451, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Agua Hedionda Creek

LOE ID:	72868
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47452	Region 9
Agua Hedionda Creek		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective in water, and 0 of 1 sample exceeds the evaluation guideline in sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples exceed the water quality objective in water, and 0 of 1 sample exceeds the evaluation guideline in sediment and these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 47452, Deltamethrin	Region 9
Agua Hedionda Creek	

LOE ID:	72870
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Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA, Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA, State Water Resources Control Board, SWAMP, December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47452, Deltamethrin

Region 9

Agua Hedionda Creek

LOE ID:	72869
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database .
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 10/14/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47453	Region 9
Agua Hedionda Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #72872, and 1 of 17 samples exceed the Criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #72872, and 1 of 17 samples exceed the Criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47453, Diazinon	Region 9
Agua Hedionda Creek	

LOE ID:	77710
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47453, Diazinon

Region 9

Agua Hedionda Creek

LOE ID:	72872
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 1 of 17 samples exceed the

Data Reference:	<p>criterion for Diazinon.</p> <p>Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/11/2005-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47453, Diazinon

Region 9

Agua Hedionda Creek

LOE ID:	72894
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based

on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation:

The sample was collected at station 904CBAHC6.

Temporal Representation:

The samples were collected in May 2008.

Environmental Conditions:

QAPP Information:

All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47453, Diazinon

Region 9

Agua Hedionda Creek

LOE ID: 72871

Pollutant: Diazinon
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).

Guideline Reference: [Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83A-92.](#)

Spatial Representation: Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 47454

Region 9

Agua Hedionda Creek

Pollutant: Dieldrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47454, Dieldrin
Agua Hedionda Creek**

Region 9

LOE ID:	72873
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	47456	Region 9
Agua Hedionda Creek		

Pollutant: Endrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47456, Endrin	Region 9
Agua Hedionda Creek	

LOE ID: 72874

Pollutant: Endrin

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47457	Region 9
Agua Hedionda Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 8 samples exceed the water quality objective in water and 0 of 1 sample exceed the water quality objective in sediment.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples exceed the water quality objective in water and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47457, Esfenvalerate/Fenvalerate
Agua Hedionda Creek**

Region 9

LOE ID:	72875
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 10/14/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 47457, Esfenvalerate/Fenvalerate
Agua Hedionda Creek**

Region 9

LOE ID:	72876
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47458	Region 9
Agua Hedionda Creek		
Pollutant:	Fenpropathrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47458, Fenpropathrin
Agua Hedionda Creek**

Region 9

LOE ID:	72877
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

**DECISION ID 47459
Agua Hedionda Creek**

Region 9

Pollutant:	Fluoranthene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47459, Fluoranthene
Agua Hedionda Creek

Region 9

LOE ID:	72878
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47460		Region 9
Agua Hedionda Creek		
Pollutant:	Fluorene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 47460, Fluorene		Region 9
Agua Hedionda Creek		

LOE ID:	72879
Pollutant:	Fluorene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47463	Region 9
Agua Hedionda Creek		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of 26 samples exceed the water quality objective for the protection of WARM freshwater aquatic life.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 26 samples exceed the water quality objective for the protection of WARM freshwater aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 	

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47463, Lead
Agua Hedionda Creek**

Region 9

LOE ID:	72880
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID 47466
Agua Hedionda Creek**

Region 9

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47466, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Agua Hedionda Creek

LOE ID: 72881

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

Guideline Reference: for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
[Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	47469	Region 9
Agua Hedionda Creek		

Pollutant: Mercury

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47469, Mercury	Region 9
Agua Hedionda Creek	

LOE ID: 72851

Pollutant: Mercury

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47470	Region 9
Agua Hedionda Creek		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support
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rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47470, Methyl Parathion

Region 9

Agua Hedionda Creek

LOE ID:	72852
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID

47471

Region 9

Agua Hedionda Creek

Pollutant:

Naphthalene

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47471, Naphthalene
Agua Hedionda Creek**

Region 9

LOE ID:	72853
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

Guideline Reference:	for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47472	Region 9
Agua Hedionda Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective for the protection of Municipal Drinking Water Supply, 0 of 26 samples exceed the water quality objective for the protection of WARM Freshwater Aquatic life in water, and 0 of 1 sample exceeds the water quality objective for the protection of WARM freshwater aquatic life in sediment.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 28 samples exceed the water quality objective for the protection of Municipal Drinking Water Supply and 0 of 26 samples exceed the water quality objective for the protection of WARM Freshwater Aquatic life in water and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47472, Nickel	Region 9
Agua Hedionda Creek	

LOE ID:	72854
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47472, Nickel

Region 9

Agua Hedionda Creek

LOE ID:	72855
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]

Temporal Representation:

Data was collected over the time period 2/17/2002-11/4/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47472, Nickel

Region 9

Agua Hedionda Creek

LOE ID: 77971

Pollutant: Nickel

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 28

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Nickel.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]

Temporal Representation:

Data was collected over the time period 2/17/2002-11/4/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID 47473

Region 9

Agua Hedionda Creek

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 28 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47473, Nitrate/Nitrite (Nitrite + Nitrate as N) Agua Hedionda Creek

Region 9

LOE ID:	77972
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]

Temporal Representation: Data was collected over the time period 2/17/2002-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	47475	Region 9
Agua Hedionda Creek		

Pollutant: Nitrogen, Nitrite

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 26 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47475, Nitrogen, Nitrite	Region 9
Agua Hedionda Creek	

LOE ID: 77973

Pollutant: Nitrogen, Nitrite

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 26

Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 47476 Region 9	
Agua Hedionda Creek	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	PAHs (Polycyclic Aromatic Hydrocarbons) Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47476, PAHs (Polycyclic Aromatic Hydrocarbons)
Agua Hedionda Creek**

Region 9

LOE ID:	72856
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**DECISION ID 47477
Agua Hedionda Creek**

Region 9

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47477, PCBs (Polychlorinated biphenyls)

Region 9

Agua Hedionda Creek

LOE ID:	72809
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 904CBAHC6 (Agua Hedionda Creek 6).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.

DECISION ID	47479	Region 9
Agua Hedionda Creek		

Pollutant: Phenanthrene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47479, Phenanthrene	Region 9
Agua Hedionda Creek	

LOE ID: 72890
Pollutant: Phenanthrene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47480		Region 9
Agua Hedionda Creek		
Pollutant:	Pyrene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Agua Hedionda Creek

LOE ID:	72891
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID

47481

Region 9

Agua Hedionda Creek

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 28 samples exceed the secondary MCL for MBAS in water.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 28 samples exceed the secondary MCL for MBAS in water and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47481, Surfactants (MBAS)

Region 9

Agua Hedionda Creek

LOE ID:	77977
Pollutant:	Surfactants (MBAS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for MBAS.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Secondary California Maximum Contaminant Level for MBAS is 0.5 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47482

Region 9

Agua Hedionda Creek

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 28 samples exceed the water quality objective for the protection of the Municipal Drinking Water Supply beneficial use, 0 of 26 samples exceed the water quality objective for the protection of the WARM freshwater aquatic life beneficial use in water, and 0 of 1 sample exceeds the water quality objective for the protection of the WARM freshwater aquatic life beneficial use in sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 28 samples exceed the water quality objective for the protection of the Municipal Drinking Water Supply beneficial use and 0 of 26 samples exceed the water quality objective for the protection of the WARM freshwater aquatic life beneficial use in water and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47482, Zinc	Region 9
Agua Hedionda Creek	

LOE ID:	77978
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

Objective/Criterion Reference:	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47482, Zinc

Region 9

Agua Hedionda Creek

LOE ID:	72895
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47482, Zinc

Region 9

Agua Hedionda Creek

LOE ID:	72883
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 43871		Region 9
Agua Hedionda Creek		
Pollutant:	Benthic Community Effects	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2025	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.	

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	77581
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	28
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty-eight of the 28 samples collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment

Spatial Representation:	The samples were collected twice a year at two stations on Agua Hedionda Creek. The stations are 904AHC-ECR and AHC-MR.
Temporal Representation:	The samples were collected in May and October from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	26225
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	<p><i>Hyaella azteca</i>-</p> <p>All four samples show significant toxicity levels (SL) as determined by the <i>Hyaella azteca</i> survival and growth test according to results in California's Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected one to three times a year from 2002-2006.</p>
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).
Temporal Representation:	Samples were collected one to three times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	26237
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	26
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty six samples of IBI data were taken from May 2001 to May 2007 at two sampling sites. Of the total number of samples, all twenty six samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: AHCECR and AHC-MR on Agua Hedionda Creek.
Temporal Representation:	Sampling occurred during May and October annually over a six year period from May 2001 to October 2006 and during May in 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects
Agua Hedionda Creek

Region 9

LOE ID:	25001
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- None of fifteen samples collected were found to be toxic as determined by the Selenastrum capricornutum growth test.
	Ceriodaphnia dubia- Three of fifteen samples collected were found to be toxic as determined by the

Ceriodaphnia dubia survival/reproductive test.

Hyalella Azteca-

Seven of fifteen samples collected were found to be toxic as determined by the Hyalella azteca survival test according to the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2002-2006.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (U.S. EPA, 2002).

Guideline Reference: [Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013](#)
[Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.

Temporal Representation: Samples were collected one to three times a year from 2002-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: Quality control for the toxicity portion of this study was conducted in accordance with the City of San Diego's NPDES program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID: 72844

Pollutant: Bifenthrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8

Number of Exceedances: 8

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Bifenthrin.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are

Objective/Criterion Reference:	harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 10/14/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	72840
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 16 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 904CBAHC6 (Agua Hedionda Creek 6).
Temporal Representation:	Survey done May 6, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	72882
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	72872
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/11/2005-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects
Agua Hedionda Creek

Region 9

LOE ID:	72865
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 10/14/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	72893
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	17
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seventeen of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 904AHC-MLS and 904AHC-TWAS-1, Agua Hedionda Creek
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	26573
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Ten samples of IBI data were taken from May 1998 to May 2001 at two sampling sites. Of the total number of samples, all ten samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 904AHCECR and 904AHCSAx on Agua Hedionda Creek.
Temporal Representation:	Sampling occurred during one to three events annually over a four year period from May 1998 to May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	77708
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	21
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 7 of 21 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	79512
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	29
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	29 total samples were collected at three stations. All 29 samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at three stations on Agua Hedionda Creek. 904CBAHC6 904AHC-TWAS-1 904AHC-MR
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project and the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	3181
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected by the Stream Team from 1999-2001. Over the 3 years, Taxa Richness remained at 6.5 to 6.0. EPT index changed, from 64.6 to 19.6 to 87.5 from 1999 to 2001. The Tolerance value remained fairly constant over the 3 year period, ranging from 4.2 to 5.5. The majority of feeding groups were collectors and filterers. Filterers increased from 2.7% to 59.3% from 1999 to 2000, and decreased to 9.6 in 2001 (Stream Team, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Agua Hedionda Creek. Exact location was not reported.

Temporal Representation:

Samples were collected in the Spring of 1999, 2000, and 2001.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID: 3180

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores at AHC-ECR ranged from 57-86, relatively low compared to other sampled waterbodies. BMI scores at AHC-ECR were near or above average, compared to other sampled waterbodies.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Agua Hedionda Creek 5 riffles downstream of El Camino Real (AHC-ECR).

Temporal Representation:

Samples were collected in May, September and November 1998 and in May 1999.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID: 3179

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0

Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat quality scores at AHC-SA were 80 and 74, relatively low compared to other waterbodies' scores. BMI scores were below average compared to other waterbodies sampled.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Agua Hedionda Creek, 5 riffles downstream of Sycamore Avenue (AHC-SA).
Temporal Representation:	Samples were collected in 05/1998 and 09/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	3184
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 4 samples exceeded the water quality standard (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Agua Hedionda Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples taken at one station in Agua Hedionda Creek No. 33.14887 -117.29758.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Agua Hedionda Creek, Part of the San Diego Coastal Streams: Hydrologic Unit Basin Number 4.32
QAPP Information:	SWAMP Quality Assurance Plan
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	3183
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, three samples exceeding The CTR criteria (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 µg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at one station in Agua Hedionda Creek No. 33.14887 -117.29758.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Agua Hedionda Creek, Part of the San Diego Coastal Streams: Hydrologic Unit Basin Number 4.31
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID:	7360
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of four samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected on September, June, March and April 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more

than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).

Temporal Representation:

Samples were collected on September, June, March and April 2002.

Environmental Conditions:

The first two samples were taken during minimum and declining base flow respectively. The last two samples were taken during wet weather, between storm events and high base flow respectively.

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID: 6713

Pollutant: Total Nitrogen as N

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 24

Number of Exceedances: 24

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: All twenty four samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 1998-2006.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.

A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Samples were collected at the mass loading station located near the lower boundary of the

Temporal Representation:
Environmental Conditions:
QAPP Information:

watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.
Samples were collected one to four times a year from 1998-2006.
Samples were collected during wet weather.
Quality control for the chemical analysis portion of this study was conducted in accordance with the City of San Diego's NPDES Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID: 6704

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 24
Number of Exceedances: 24

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: All twenty four samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007.
Samples were collected one to four times a year from 1998-2006.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.

Temporal Representation: Samples were collected one to four times a year from 1998-2006.
Environmental Conditions: Samples were collected during wet weather.
QAPP Information: Quality control for the toxicity portion of this study was conducted in accordance with the City of San Diego's NPDES monitoring program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43871, Benthic Community Effects

Region 9

Agua Hedionda Creek

LOE ID: 7475

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- All four samples show significant toxicity levels (SL) as determined by the Selenastrum capricornutum growth test. Ceriodaphnia dubia- All four samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival and reproduction test according to results in California's Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected one to three times a year from 2002-2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9 Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).
Temporal Representation:	Samples were collected one to three times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	47429	Region 9
Agua Hedionda Creek		
Pollutant:	Bifenthrin	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2029	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding the pollutant to the CWA section 303(d) List.	

Two lines of evidence are available in the administrative record to assess this pollutant. Eight of the eight water samples exceed the GUIDELINE. Zero of one sediment sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of eight water samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 47429, Bifenthrin
Agua Hedionda Creek**

Region 9

LOE ID:	72843
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Line of Evidence (LOE) for Decision ID 47429, Bifenthrin

Region 9

Agua Hedionda Creek

LOE ID:	72844
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 10/14/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47429, Bifenthrin

Region 9

Agua Hedionda Creek

LOE ID:	26225
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	<p><i>Hyalella azteca</i>-</p> <p>All four samples show significant toxicity levels (SL) as determined by the <i>Hyalella azteca</i> survival and growth test according to results in California's Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected one to three times a year from 2002-2006.</p>
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).
Temporal Representation:	Samples were collected one to three times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	47433	Region 9
Agua Hedionda Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess the listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the twenty-one water samples exceed the GUIDELINE. Zero of one sediment sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p>
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This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of twenty-one samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47433, Chlorpyrifos

Region 9

Agua Hedionda Creek

LOE ID:	77708
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 7 of 21 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47433, Chlorpyrifos**Region 9****Agua Hedionda Creek**

LOE ID:	77709
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 2/17/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47433, Chlorpyrifos**Region 9****Agua Hedionda Creek**

LOE ID:	72894
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 904CBAHC6.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47433, Chlorpyrifos

Region 9

Agua Hedionda Creek

LOE ID:	72847
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	47447	Region 9
Agua Hedionda Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of the three water samples exceed the GUIDELINE and zero of one sediment sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of three water samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 47447, Cypermethrin		Region 9
Agua Hedionda Creek		

LOE ID:	72864
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47447, Cypermethrin

Region 9

Agua Hedionda Creek

LOE ID:	26225
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	Hyaella azteca- All four samples show significant toxicity levels (SL) as determined by the Hyaella azteca survival and growth test according to results in California's Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected one to three times a year from 2002-2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code Â'SLÂ') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).
Temporal Representation:	Samples were collected one to three times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 47447, Cypermethrin

Region 9

Agua Hedionda Creek

LOE ID:	72893
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	17
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seventeen of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 904AHC-MLS and 904AHC-TWAS-1, Agua Hedionda Creek
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47447, Cypermethrin

Region 9

Agua Hedionda Creek

LOE ID:	72865
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 10/14/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	42264	Region 9
Agua Hedionda Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twenty-two of the 24 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of 24 samples exceed the Water Contact Recreation criteria and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42264, Indicator Bacteria

Region 9

Agua Hedionda Creek

LOE ID:	7361
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Twenty two of twenty four samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 1998-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.
Temporal Representation:	Samples were collected one to four times a year from 1998 -2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the toxicity portion of this study was conducted in accordance with the City of San Diego's NPDES monitoring program.

Line of Evidence (LOE) for Decision ID 42264, Indicator Bacteria**Region 9****Agua Hedionda Creek**

LOE ID:	7309
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	All eighteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 1998-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the bacteriological criteria for enterococcus sets a maximum limit at 61 colonies per 100mL (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.
Temporal Representation:	Samples were collected one to four times a year from 1998-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the toxicity portion of this study was conducted in accordance with the City of San Diego's NPDES monitoring program.
QAPP Information Reference(s):	

DECISION ID**47467****Region 9****Agua Hedionda Creek**

Pollutant:	Malathion
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. Eight of the twenty-five samples exceed the GUIDELINE.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of twenty-five samples exceed the GUIDELINE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 47467, Malathion
Agua Hedionda Creek**

Region 9

LOE ID:	77707
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The CDPH archived health advisory for malathion is 160 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Agua Hedionda Creek

LOE ID:	72882
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 2 monitoring sites [Agua Hedionda Creek - 904AHC-MLS, Agua Hedionda Creek - 904AHC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

44465

Region 9

Agua Hedionda Creek

Pollutant:	Sulfates
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Regional Board Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. All eight of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All eight samples exceeded the sulfate objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

State Board Review and Conclusion:

The original listing in 2006 applied Table 3.1 where the minimum sample requirement is 2. However, Region 9 considers sulfates a conventional pollutant and as such, Table 3.2 should have been applied with a minimum requirement of 5 samples.

In addition, upon review of the past record, there were only 4 samples that exceeded the water quality objective, not the 8 samples as originally reported.

State Board staff re-evaluated the original listing and recommends to Delist for sulfates. The revised recommendation is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. Under this section an existing listing may be removed if the listing was based on faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data.

One line of evidence is available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to support removing this water segment-pollutant combination from the section 303(d) list. due to a flaw in the original listing.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 4 samples exceeded the sulfate objective and this does not exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. This pollutant should not have been listed in 2006.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44465, Sulfates

Region 9

Agua Hedionda Creek

LOE ID:

31397

Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 4 samples exceeded the basin plan objective (SWAMP, 2004).
Data Reference:	Database as of 3-10-05 and SWAMP Information Management Plan. Sacramento, CA
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan WQO from Title 22 Table 64449-B Secondary Maximum Contaminant Levels of 250 mg/l.
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64449 Secondary Drinking Water Standards
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples taken from one sample site at Agua Hedionda Creek station No:33.14887 -117.29758
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	
QAPP Information:	SWAMP Quality Assurance Plan
QAPP Information Reference(s):	

DECISION ID	33728	Region 9
Agua Hedionda Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33728, Total Dissolved Solids	Region 9
Agua Hedionda Creek	

LOE ID:	3177
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 1998. One sample was collected. It was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Agua Hedionda Creek at Sycamore Avenue.
Temporal Representation:	Sample was collected on 06/10/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	47450	Region 9
Agua Hedionda Creek		

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47450, DDE (Dichlorodiphenyldichloroethylene)

Region 9

Agua Hedionda Creek

LOE ID:	72867
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

47478

Region 9

Agua Hedionda Creek

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47478, Permethrin, total
Agua Hedionda Creek****Region 9**

LOE ID:	72889
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al.

Guideline Reference: (2005). [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	33729	Region 9
Agua Hedionda Creek		

Pollutant: Turbidity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33729, Turbidity	Region 9
Agua Hedionda Creek	

LOE ID: 3178

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the RWQCB in 1998. One sample was collected and was not in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Agua Hedionda Creek at Sycamore Avenue.
Temporal Representation:	Sample was collected on 06/10/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32810	Region 9
Agua Hedionda Creek		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the Title 22 Secondary Drinking Water MCLs of 0.05 mg/L for manganese.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 4 samples exceeded the MCL secondary drinking water standard and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32810, Manganese	Region 9
Agua Hedionda Creek	

LOE ID:	3184
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Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 4 samples exceeded the water quality standard (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Agua Hedionda Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples taken at one station in Agua Hedionda Creek No. 33.14887 -117.29758.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Agua Hedionda Creek, Part of the San Diego Coastal Streams: Hydrologic Unit Basin Number 4.32
QAPP Information:	SWAMP Quality Assurance Plan
QAPP Information Reference(s):	

DECISION ID	33011	Region 9
Agua Hedionda Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of 28 samples exceed the Basin Plan water quality objective for Total Nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-seven of 28 samples exceed the Basin Plan water quality objective for Total Nitrogen as N and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33011, Nitrogen

Region 9

Agua Hedionda Creek

LOE ID:	6713
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	24
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All twenty four samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 1998-2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.
Temporal Representation:	Samples were collected one to four times a year from 1998-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the City of San Diego's NPDES Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33011, Nitrogen

Region 9

Agua Hedionda Creek

LOE ID:	7360
Pollutant:	Total Nitrogen as N

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of four samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected on September, June, March and April 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at monitoring station Agua Hedionda Creek 6 on the main stem of Agua Hedionda creek (station id: 904CBAQH6 lat/long: 33.14887/-117.29758).
Temporal Representation:	Samples were collected on September, June, March and April 2002.
Environmental Conditions:	The first two samples were taken during minimum and declining base flow respectively. The last two samples were taken during wet weather, between storm events and high base flow respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	42357	Region 9
Agua Hedionda Creek		
Pollutant:	Phosphorus	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:	

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 28 samples exceed the water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-four of 28 samples exceed the Basin Plan objectives for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42357, Phosphorus

Region 9

Agua Hedionda Creek

LOE ID:	7359
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the four samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected on September 17, 2002; June 4, 2002; March 12, 2002; and April 23, 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	The samples were collected from the monitoring station Agua Hedionda Creek 6 (station id: 904CBAQH6 lat/long: 33.14887/-117.29758), located on the main stem of Agua Hedionda Creek
Temporal Representation:	Samples were collected on September 17, 2002; June 4, 2002; March 12, 2002; and April 23, 2002.
Environmental Conditions:	The first two samples were taken during minimum and declining base flow, respectively. The

last two samples were taken during wet weather, between storm events and high base flow respectively.

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 42357, Phosphorus

Region 9

Agua Hedionda Creek

LOE ID: 6704

Pollutant: Phosphorus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 24

Number of Exceedances: 24

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: All twenty four samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 1998-2006.

Data Reference: [Urban Runoff Monitoring. Volume 1- Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).

Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the El Camino Real Bridge crossing immediately downstream of the confluence of Agua Hedionda Creek and Calavera Creek.

Temporal Representation: Samples were collected one to four times a year from 1998-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: Quality control for the toxicity portion of this study was conducted in accordance with the City of San Diego's NPDES monitoring program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Buena Creek](#)
Water Body ID: CAR9043200020050630113820
Water Body Type: River & Stream

DECISION ID	33503	Region 9
Buena Creek		

Pollutant: Nitrate and Nitrite
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess pollutant. Five of 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 5 samples exceed the criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33503, Nitrate and Nitrite	Region 9
Buena Creek	

LOE ID: 73092

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected on a single day 9/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33503, Nitrate and Nitrite Buena Creek

Region 9

LOE ID:	3185
Pollutant:	Nitrate and Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 4 samples exceeded the MCLs (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters designated for use as domestic or municipal supply shall not contain concentrations of nitrate and nitrite as nitrogen in excess of Maximum Contaminant Levels (MCL) set forth in Title 22 of the CCR, Table 64431-A of section 64431.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample site at Buena Creek: 33.17225 - 117.20887.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Buena Creek 904.32.
QAPP Information:	SWAMP Quality Assurance Plan
QAPP Information Reference(s):	

DECISION ID	48030	Region 9
Buena Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48030, Cadmium	Region 9
Buena Creek	

LOE ID: 73081
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 7
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Buena Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected from 6/30/2003 through 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48030, Cadmium

Region 9

Buena Creek

LOE ID:	73082
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Buena Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected from 6/30/2003 through 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria for MUN and 0 of 0 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria for MUN and 0 of 0 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48034, Chlorpyrifos	Region 9
Buena Creek	

LOE ID:	77986
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48034, Chlorpyrifos
Buena Creek

Region 9

LOE ID:	73083
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48031	Region 9
Buena Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48031, Copper	Region 9
Buena Creek	

LOE ID:	73085
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Buena Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected from 6/30/2003 through 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48031, Copper
Buena Creek

Region 9

LOE ID:	73084
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Buena Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected from 6/30/2003 through 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48035

Region 9

Buena Creek

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria for MUN and 0 of 5 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria for MUN and 0 of 5 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48035, Diazinon

Region 9

Buena Creek

LOE ID: 77987

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	5
Number of Exceedances:	0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality

Objective/Criterion Reference:	Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L. 2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48035, Diazinon

Region 9

Buena Creek

LOE ID:	73086
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48032

Region 9

Buena Creek

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48032, Lead Buena Creek

Region 9

LOE ID:	73089
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Buena Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the

hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]

Temporal Representation: Data was collected from 6/30/2003 through 6/10/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48032, Lead

Region 9

Buena Creek

LOE ID: 73090

Pollutant: Lead

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Buena Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]

Temporal Representation: Data was collected from 6/30/2003 through 6/10/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

48037

Region 9

Buena Creek

Pollutant:

Malathion

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria for MUN and 0 of 5 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria for MUN and 0 of 5 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48037, Malathion

Region 9

Buena Creek

LOE ID: 73091

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48037, Malathion

Region 9

Buena Creek

LOE ID:	77988
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48039

Region 9

Buena Creek

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48039, Nitrogen, Nitrite
Buena Creek**

Region 9

LOE ID: 73093

Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena

Temporal Representation:	Creek @ Robelini Drive]
Environmental Conditions:	Data was collected over the time period 6/30/2003-9/3/2003.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48040	Region 9
Buena Creek		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48040, Nitrogen, ammonia (Total Ammonia)	Region 9
Buena Creek	

LOE ID:	73080
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected on a single day 6/30/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48033	Region 9
Buena Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceed the criteria for MUN and 0 of 7 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48033, Zinc

Region 9

Buena Creek

LOE ID:	73063
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Buena Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected from 6/30/2003 through 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48033, Zinc

Region 9

Buena Creek

LOE ID:	73064
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Buena Creek to determine

beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]

Temporal Representation: Data was collected from 6/30/2003 through 6/10/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48036	Region 9
Buena Creek		

Pollutant: Indicator Bacteria

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2029

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 7 of 8 and 6 of 8 single samples exceed the water quality objectives for single sample maximums of enterococcus and fecal coliform for the protection of REC-1, and 3 of 8 samples exceeded the evaluation guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2003 to 2009 show that 7 of 8 and 6 of 8 single samples exceed the water quality objectives for single sample maximums of enterococcus and fecal coliform for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48036, Indicator Bacteria
Buena Creek**

Region 9

LOE ID:	73094
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 6/30/2003-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 48036, Indicator Bacteria
Buena Creek**

Region 9

LOE ID:	73088
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8

Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 6/30/2003-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48036, Indicator Bacteria

Region 9

Buena Creek

LOE ID:	73087
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Buena Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Buena Creek was collected at 1 monitoring site [Buena Creek @ Robelini Drive]
Temporal Representation:	Data was collected over the time period 6/30/2003-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	44287	Region 9
Buena Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of four of the samples exceed the water quality objective for total nitrogen.

According to table 3.1 of the Listing Policy, the minimum sample requirement to assess toxic pollutants is 2.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four of the samples exceed the water quality objective for total nitrogen. and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44287, Nitrogen	Region 9
Buena Creek	

LOE ID:	6542
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected at Buena Creek show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Water samples were collected in March, April, June and September 2002. Water Quality Control Plan for the San Diego Basin
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Buena Creek station 904CBBUR1; (Latitude 33.1725, Longitude -117.2082).
Temporal Representation:	Water samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	33504	Region 9
Buena Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of four samples exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of four samples exceeded the water quality standard for phosphorus and this exceeds the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33504, Phosphorus

Region 9

Buena Creek

LOE ID:	6540
Pollutant:	Phosphorus
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of four samples collected at Buena Creek show excessive phosphorous concentrations according to results in California's Surface Water Ambient Monitoring Program, 2007. Samples were collected in March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Buena Creek station 904CBBUR1; (Latitude 33.1725, Longitude -117.2082).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID

44130

Region 9

Buena Creek

Pollutant:	Phosphate
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the water quality phosphate goal of 0.1 mg/L in stream and flowing waters.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 4 samples exceeded the phosphate water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

The original listing in 2006 applied Table 3.1 of the Listing Policy to determine if phosphorus should be listed. Table 3.1 is used for toxicants with a minimum sample requirement of 2 samples. However, Region 9 considers phosphorus a conventional pollutant and as such, Table 3.2 should have been applied with a minimum requirement of 5 samples.

There are only 4 samples in the line of evidence and this is insufficient to place the water body-pollutant combination on the section 303(d) list.

Furthermore, the line of evidence used to list this water body was based on phosphorus data and not phosphate data. The appropriate decision should have been for phosphorus.

State Board staff re-evaluated the original listing and recommends to Delist phosphate. Also, in order to correctly track these phosphorus data, these same data have been reassessed under the correct pollutant name "phosphorus" with a Do Not List decision. The revised recommendation for delisting phosphate is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. Under this section an existing listing may be removed if the listing was based on faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data.

One line of evidence is available in the administrative record to assess this pollutant. Four of 4 samples exceed the water quality goal of 0.1 mg/L for phosphorus in streams and flowing waters.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 4 samples exceeded the basin plan water quality goal and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. This pollutant should not have been listed in 2006.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44130, Phosphate**Region 9****Buena Creek**

LOE ID:	3188
Pollutant:	Phosphate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, four samples exceeding the basin plan goal (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses. Water Quality Control Plan phosphate goal of 0.1 mg/L in stream and flowing waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One Station at Buena Creek: 33.17225 -117.20887.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Buena Creek 904.32.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID**33072****Region 9****Buena Creek**

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the California Toxic Rule: Human Health carcinogenic risk for consumption of water & organisms of 0.00059 Åµg/L.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d)</p>

list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 4 samples exceeded the CTR DDT criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33072, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Buena Creek

LOE ID:	3186
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 4 samples exceeded the CTR criterion (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	California Toxic Rule: Human Health carcinogenic risk for consumption of water & organisms, 0.00059 µg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample site in Buena Creek at 33.17225 - 117.20887.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Buena Creek 904.32
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Encinitas Creek](#)
Water Body ID: CAR9045100019991117144759
Water Body Type: River & Stream

DECISION ID	48427	Region 9
Encinitas Creek		

Pollutant: Ammonia (Unionized)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48427, Ammonia (Unionized)	Region 9
Encinitas Creek	

LOE ID: 73526
Pollutant: Ammonia (Unionized)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: 0 of 1 samples exceed the water objective for un-ionized ammonia (NH₃) at 0.025 mg/l (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The calculated un-ionized ammonia (as N) values was then established and compared to the un-ionized Ammonia (as N) at 0.025 mg/L in the RB9 Basin Plan.

Data Reference: [Statewide Perennial Streams Assessment 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, San Diego Region (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH₃) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at 904PS0034 (Encinitas Creek).

Temporal Representation: Samples collected on 5/13/2008.

Environmental Conditions:

QAPP Information: SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 48430		Region 9
Encinitas Creek		
Pollutant:	Oxygen, Dissolved	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the	

**Line of Evidence (LOE) for Decision ID 48430, Oxygen, Dissolved
Encinitas Creek**
Region 9

LOE ID:	73527
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The sample collected exceeded the objective.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample was collected from the 904PS0034 station.
Temporal Representation:	One sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	

**DECISION ID 48428
Encinitas Creek**
Region 9

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>
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1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.2 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48428, Temperature, water Encinitas Creek

Region 9

LOE ID:	72837
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples total were collected however there is no evaluation guideline for assessing temperature for the warm freshwater beneficial use.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Water Quality Control Plan San Diego Basin - Region 9).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station BTQ-010 (Levante St. Bridge (south side)).
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	"San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego)."
QAPP Information Reference(s):	Quality Assurance Project Plan for San Diego Regional Water Quality Assessment and Outreach Project.

DECISION ID 48429
Encinitas Creek

Region 9

Pollutant: pH

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48429, pH
Encinitas Creek**

Region 9

LOE ID: 73528

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Numeric data generated from 1 sample collected had no exceedences.
Data Reference: [Statewide Perennial Streams Assessment 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: In inland surface waters[,] the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the 904PS0034 station.
Temporal Representation: One sample was collected in May 2008
Environmental Conditions:

DECISION ID	44341	Region 9
Encinitas Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects	Region 9
Encinitas Creek	

LOE ID:	3191
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores for EC-GVR ranged from 104 to 116,

Data Reference:	moderate compared to other sampled waterbodies. BMI scores at EC-GVR were all below average. (SDRWQCB, 1999a). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Encinitas Creek, 5 riffles downstream of Green Valley Road (EC-GVR).
Temporal Representation:	Samples were collected in May, September, November 1998 and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects
Encinitas Creek

Region 9

LOE ID:	72762
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three of the three samples collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at station ENC-GVR on Encinitas Creek.
Temporal Representation:	The samples were collected in May and October 2001 and May 2002.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring

QAPP Information Reference(s): Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
[Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.](#)

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects
Encinitas Creek

Region 9

LOE ID: 26383

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 7

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Seven samples of IBI data were taken from May 1998 to May 2000 at two sampling sites. All seven of the samples exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35. number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at two sites: 904ENCGVR and 904ENCRSF on Encinitas Creek.
Temporal Representation: Sampling occurred during one to three events from May 1998 to May 2000.
Environmental Conditions:
QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.

QAPP Information Reference(s): [State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan](#)

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects
Encinitas Creek

Region 9

LOE ID: 79516

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples were collected from two sites on Encinitas Creek. All four samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Statewide Perennial Streams Assessment 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at station 904ENC-GVR and 904PS0034 on Encinitas Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and by the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	Statewide Perennial Streams Assessment 2008 Surface Water Ambient Monitoring Program Quality Assurance Program Plan Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects
Encinitas Creek

Region 9

LOE ID:	26382
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Encinitas Creek station 904CBENC2 from March 2002 to September 2002. The samples showed significant toxicity levels (SL) in the following test: Hyalella azteca sediment toxicity. Two of four samples exhibited toxicity. The tests results can be found in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Water Toxicity Samples were collected at Encinitas Creek station 2 (904CBENC2); (Latitude 33.0682, Longitude -117.2625).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects

Region 9

Encinitas Creek

LOE ID:	21383
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Encinitas Creek station 904CBENC2 from March 2002 to September 2002. The samples showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - one of the four samples was toxic. Ceriodaphnia dubia survival/reproductive test - three of the four samples showed toxicity. The tests results can be found in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Water Toxicity Samples were collected at Encinitas Creek station 2 (904CBENC2); (Latitude 33.0682, Longitude -117.2625).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects

Region 9

Encinitas Creek

LOE ID:	6526
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of four samples collected at Encinitas Creek show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Encinitas Creek station 2, 904CBENC2; (Latitude 33.06824, Longitude -117.262515)
Temporal Representation:	Water samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the California's Surface Water Ambient Monitoring Program.
[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects

Region 9

Encinitas Creek

LOE ID: 6523

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 4

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: All four samples collected at Encinitas Creek show excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June and September 2002.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Guideline Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA](#)

Spatial Representation: Water samples were collected at Encinitas Creek station 2, 904CBENC2; (Latitude 33.06824, Longitude -117.262515).

Temporal Representation: Samples were collected in March, April, June and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects

Region 9

Encinitas Creek

LOE ID: 3193

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, 4 samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream and flowing waters.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station at Encinitas Creek: 33.06828 -117.26261
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects

Region 9

Encinitas Creek

LOE ID:	72790
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score was 0.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected from Encinitas Creek.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and stored in the SWAMP database.

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects**Region 9****Encinitas Creek**

LOE ID:	3192
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected by the Stream Team in 1999. Taxa richness was 5. There were 0 EPT taxa. Tolerance value was 2.9. Feeding groups were 64.3% collectors and 7.1% predators. Other feeding groups were not reported. (Stream Team, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Encinitas Creek. Exact sampling location was not reported.
Temporal Representation:	Samples were collected in the Fall of 1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44341, Benthic Community Effects**Region 9****Encinitas Creek**

LOE ID:	26716
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three samples of IBI data were taken from May 2001 to May 2002 at one sampling site. All three samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological

Objective/Criterion Reference:	<p>responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.</p> <p>Water Quality Control Plan for the San Diego Basin</p>
Evaluation Guideline:	<p>The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)</p>
Guideline Reference:	<p>A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13</p>
Spatial Representation:	Samples were collected at one site: ENC-GVR on Encinitas Creek.
Temporal Representation:	Sampling occurred during May and October in 2001 and on May 2002.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

DECISION ID	33095	Region 9
Encinitas Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the Basin Plan Objective for Phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of four samples exceed the Basin Plan Objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33095, Phosphorus	Region 9
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Encinitas Creek

LOE ID:	3193
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, 4 samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream and flowing waters.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station at Encinitas Creek: 33.06828 -117.26261
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID 43314

Region 9

Encinitas Creek

Pollutant:	Selenium
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess pollutant. Four of the four samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of four samples exceeded the GUIDELINE and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 43314, Selenium

Region 9

Encinitas Creek

LOE ID:	6523
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected at Encinitas Creek show excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Encinitas Creek station 2, 904CBENC2; (Latitude 33.06824, Longitude -117.262515).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

33112

Region 9

Encinitas Creek

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of 4 samples exceeded the CDFG Aquatic Life Hazard Assessment Criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 33112, Diazinon
Encinitas Creek**

Region 9

LOE ID:	3194
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Of the four water samples, none of the samples were exceeding. (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticides or combination of pesticides shall be present in the water column, sediments, or biota at concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CDFG Aquatic Life Hazard Assessment Criteria 1-hour average 0.16 ug/L (Siepman & Finlayson, 2000; Finlayson, 2004).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station at Encinitas Creek: 33.06828 -117.26261.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	42670	Region 9
Encinitas Creek		

Pollutant:	Nitrogen
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the 4 samples exceed the Basin Plan water quality objective for total nitrogen as N.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 4 samples exceed the Basin Plan water quality objective for total nitrogen as N and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42670, Nitrogen	Region 9
Encinitas Creek	

LOE ID:	6526
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of four samples collected at Encinitas Creek show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote

aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Water samples were collected at Encinitas Creek station 2, 904CBENC2; (Latitude 33.06824, Longitude -117.262515)

Temporal Representation:

Water samples were collected in March, April, June and September 2002.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID	33792	Region 9
Encinitas Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33792, Total Dissolved Solids	Region 9
Encinitas Creek	

LOE ID:	3189
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Unknown
Fraction:	Total

Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Encinitas Creek at Green Valley Road.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33763	Region 9
Encinitas Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33763, Turbidity	Region 9
Encinitas Creek	

LOE ID:	3190
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Encinitas Creek at Green Valley Rd.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43313	Region 9
Encinitas Creek		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Five of the eight samples exceed the water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the eight samples exceed the Basin Plan objective for toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43313, Toxicity

Region 9

Encinitas Creek

LOE ID:	26382
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Encinitas Creek station 904CBENC2 from March 2002 to September 2002. The samples showed significant toxicity levels (SL) in the following test: Hyalella azteca sediment toxicity. Two of four samples exhibited toxicity. The tests results can be found in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Water Toxicity Samples were collected at Encinitas Creek station 2 (904CBENC2); (Latitude 33.0682, Longitude -117.2625).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43313, Toxicity

Region 9

Encinitas Creek

LOE ID:	21383
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Encinitas Creek station 904CBENC2 from March 2002 to September 2002. The samples showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - one of the four samples was toxic. Ceriodaphnia dubia survival/reproductive test - three of the four samples showed toxicity. The tests results can be found in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Water Toxicity Samples were collected at Encinitas Creek station 2 (904CBENC2); (Latitude 33.0682, Longitude -117.2625).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Cottonwood Creek \(San Marcos Creek watershed\)](#)
Water Body ID: CAR9045100020011009142248
Water Body Type: River & Stream

DECISION ID	33515	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant: DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. Two of 4 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 4 samples exceed the criteria in water and 0 of 1 sample exceeds the criteria in sediment and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33515, DDT (Dichlorodiphenyltrichloroethane)	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID: 3199

Pollutant: DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, two samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	California Toxic Rule: Freshwater Chronic .001 mg/L. Human Health-FW (water & organisms) .00059 mg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station at Cottonwood Creek: 33.18147 -117.32893.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33515, DDT (Dichlorodiphenyltrichloroethane)
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	73320
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:
QAPP Information Reference(s):

SWAMP data collected before September 2008 followed the QAMP 2002.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	33142	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. Four of five samples exceed the sediment toxicity criteria and four of four samples exceed the water toxicity criteria. The water segment does have associated pollutant(s) samples that exceed water quality objectives.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of five samples exceed the sediment toxicity criteria and four of four samples exceed the water toxicity criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33142, Toxicity	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID:	73349
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant

toxicity. The toxicity test included survival and growth of *Hyaella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.

Guideline Reference: [Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064](#)

Spatial Representation: The sample was collected at station 904CBCWC2.

Temporal Representation: The sample was collected in January 2007.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33142, Toxicity
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID: 72824

Pollutant: Chlordane
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: 1 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data were collected at the following station 904CBCWC2 (Cottonwood Creek 2).

Temporal Representation: The samples were collected on 1/7/2007.

Environmental Conditions:

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33142, Toxicity

Region 9

Cottonwood Creek (San Marcos Creek watershed)

LOE ID: 73317

Pollutant: Cypermethrin

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).

Guideline Reference: [Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

Line of Evidence (LOE) for Decision ID 33142, Toxicity

Region 9

Cottonwood Creek (San Marcos Creek watershed)

LOE ID: 73308

Pollutant: Bifenthrin

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 33142, Toxicity
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	3197
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	Three out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. Note that all four samples actually had significant toxicity relative to the control, but only the three samples without any QA qualifiers were considered as exceedances (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All samples were collected from one station, Cottonwood Creek 2.
Temporal Representation:	Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002, June 4, 2002 and September 17, 2002.
Environmental Conditions:	Cottonwood Creek = 904.51
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33142, Toxicity
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	3199
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, two samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
	California Toxic Rule: Freshwater Chronic .001 mg/L. Human Health-FW (water & organisms) .00059 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station at Cottonwood Creek: 33.18147 -117.32893.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33142, Toxicity
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	21379
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Pollutant:	Toxicity
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Cottonwood Creek station 2, 904CBCWC2. Samples were collected March, April, June and September 2002.
	Samples showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - three of the four samples exhibited toxicity. The test results are from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at Cottonwood Creek station 2,(904CBCWC2). (Latitude 30.0486, Longitude -117.2954).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 33142, Toxicity
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	8517
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Cottonwood Creek station 2, 904CBCWC2 on March,

April, June, and September 2002. All samples showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule, 40 CFR Part 131, U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Spatial Representation: Water samples were collected at Cottonwood Creek station 2, 904CBCWC2; (Latitude 33.0486, Longitude -117.2954).

Temporal Representation: Water samples were collected in March, April June, and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID 48291 Region 9	
Cottonwood Creek (San Marcos Creek watershed)	
Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Cottonwood Creek (San Marcos Creek watershed)

LOE ID:	73308
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

48292

Region 9

Cottonwood Creek (San Marcos Creek watershed)

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. One of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48292, Chlordane
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	72824
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	1 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 904CBCWC2 (Cottonwood Creek 2).
Temporal Representation:	The samples were collected on 1/7/2007.
Environmental Conditions:	

DECISION ID	48335	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48335, Chlorpyrifos	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID:	73309
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy

Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response, CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48294		Region 9
Cottonwood Creek (San Marcos Creek watershed)		
Pollutant:	Cyfluthrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48294, Cyfluthrin
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID: 73310

Pollutant: Cyfluthrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).

Guideline Reference: [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 48295

Region 9

Cottonwood Creek (San Marcos Creek watershed)

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48295, Cyhalothrin, Lambda
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	73316
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972. with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Data was collected on a single day 1/7/2007.
Staff is not aware of any special conditions that might affect interpretation of the data.
SWAMP data collected before September 2008 followed the QAMP 2002.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	48293	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. One of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48293, Cypermethrin	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID:	73317
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48296	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48296, DDD (Dichlorodiphenyldichloroethane)
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	73318
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48297

Region 9

Cottonwood Creek (San Marcos Creek watershed)

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48297, DDE (Dichlorodiphenyldichloroethylene)		Region 9
Cottonwood Creek (San Marcos Creek watershed)		
LOE ID:	73319	
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.	
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).	
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]	

Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48298	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48298, Deltamethrin	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID:	73327
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48299	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48299, Diazinon
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	73328
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).Â
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**DECISION ID 48300
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48300, Dieldrin		Region 9
Cottonwood Creek (San Marcos Creek watershed)		
LOE ID:	73329	
Pollutant:	Dieldrin	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.	
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).	
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was	

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Data was collected on a single day 1/7/2007.
Staff is not aware of any special conditions that might affect interpretation of the data.
SWAMP data collected before September 2008 followed the QAMP 2002.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	48301	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48301, Endrin	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID:	73330
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48302 Region 9	
Cottonwood Creek (San Marcos Creek watershed)	
Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48302, Esfenvalerate/Fenvalerate
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID: 73331

Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).

Guideline Reference: [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 48303

Region 9

Cottonwood Creek (San Marcos Creek watershed)

Pollutant: Fenpropathrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 48303, Fenpropathrin
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	73336
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.

Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	48332	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Fipronil
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48332, Fipronil		Region 9
Cottonwood Creek (San Marcos Creek watershed)		

LOE ID:	73337
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48337	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Fipronil Sulfide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48337, Fipronil Sulfide
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	73338
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48338

Region 9

Cottonwood Creek (San Marcos Creek watershed)

Pollutant:	Fipronil Sulfone
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48338, Fipronil Sulfone
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID: 73339

Pollutant: Fipronil Sulfone
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).

Guideline Reference: [Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	48304	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48304, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID: 73340

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48341	Region 9
Cottonwood Creek (San Marcos Creek watershed)		
Pollutant:	Permethrin, total	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 	

samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48341, Permethrin, total
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	73347
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48342

Region 9

Cottonwood Creek (San Marcos Creek watershed)

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48342, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Cottonwood Creek (San Marcos Creek watershed)

LOE ID:	73348
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

Guideline Reference:	for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 43602 Region 9	
Cottonwood Creek (San Marcos Creek watershed)	
Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Other Source Unknown Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, the station sampled exhibited degradation during all sampling events, and historic data from prior listings also showed degradation utilizing the southern California IBI.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects Region 9	
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID: 3199

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, two samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	California Toxic Rule: Freshwater Chronic .001 mg/L. Human Health-FW (water & organisms) .00059 mg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station at Cottonwood Creek: 33.18147 -117.32893.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	3197
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Toxicity testing of sediments
Data Used to Assess Water Quality:	Three out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. All samples were tested using the 10-day Hyallela azteca test. Note that all four samples actually had significant toxicity relative to the control, but only the three samples without any QA qualifiers were considered as exceedances (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan,

Objective/Criterion Reference: [pages 3-15 to 3-16; September 8, 1994\).](#)
[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: All samples were collected from one station, Cottonwood Creek 2.
Temporal Representation: Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002, June 4, 2002 and September 17, 2002.

Environmental Conditions: Cottonwood Creek = 904.51
QAPP Information: SWAMP QAPP.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID: 3195

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: -N/A
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: The Cottonwood Creek and Encinitas Creek Bioassessment Study Report was written in December 2003. The report states that, "The stream bioassessment survey at Cottonwood Creek indicated that reaches of the stream upstream and downstream of the water purification facility are very similar in the benthic macroinvertebrate community composition. Chironomid midges, the black fly Simulium, and ostracod crustaceans dominated both sites. The Index of Biotic Integrity was substantially higher downstream of the water purification facility, due to lower percentage of non-insect taxa and a lower percentage of tolerant taxa." (City of Encinitas, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No objective was found.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The UV system is along Cottonwood Creek before it enters Moonlight Beach. Samples for the Bioassessment were collected upstream and downstream of the treatment facility.
Temporal Representation: The report for the study is dated December 2003.
Environmental Conditions:
QAPP Information: Some QA information is included in the report titled Cottonwood Creek and Encinitas Creek Bioassessment Study. Prepared by MEC Analytical Systems, Inc. for the City of Encinitas, December 2003. The report includes information regarding sample site selection and description, sample collection procedures, laboratory processing and analysis, and data analysis.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	79519
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three of the three samples collected were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at one station on Cottonwood Creek. The station is 904CC-E.
Temporal Representation:	The samples were collected in May and October 2001 and May 2002.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Progr
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	73308
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects

Region 9

Cottonwood Creek (San Marcos Creek watershed)

LOE ID:	72760
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three of the three samples collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin

Objective/Criterion Reference:	Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at one station on Cottonwood Creek. The station is CC-E..
Temporal Representation:	The samples were collected in May and October 2001 and May 2002.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	73317
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (San Marcos Creek watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (San Marcos Creek watershed) was collected at 1 monitoring site [Cottonwood Creek 2 - 904CBCWC2]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects**Region 9****Cottonwood Creek (San Marcos Creek watershed)**

LOE ID:	72824
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	1 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 904CBCWC2 (Cottonwood Creek 2).
Temporal Representation:	The samples were collected on 1/7/2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects**Region 9****Cottonwood Creek (San Marcos Creek watershed)**

LOE ID:	73349
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if

Data Reference:	provided). Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 904CBCWC2.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	21379
Pollutant:	Toxicity
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Cottonwood Creek station 2, 904CBCWC2. Samples were collected March, April, June and September 2002. Samples showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - three of the four samples exhibited toxicity. The test results are from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control

Guideline Reference:	values less than the evaluation threshold. Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at Cottonwood Creek station 2,(904CBCWC2). (Latitude 30.0486, Longitude -117.2954).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects

Region 9

Cottonwood Creek (San Marcos Creek watershed)

LOE ID:	8517
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Cottonwood Creek station 2, 904CBCWC2 on March, April, June, and September 2002. All samples showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Cottonwood Creek station 2, 904CBCWC2; (Latitude 33.0486, Longitude -117.2954).
Temporal Representation:	Water samples were collected in March, April June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects

Region 9

Cottonwood Creek (San Marcos Creek watershed)

LOE ID:	6551
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Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All 4 samples collected show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Water samples were collected in March, April June, and September 2002.
Data Reference:	Water Quality Control Plan for the San Diego Basin
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Cottonwood Creek station 904CBCWC2; (Latitude 33.0486, Longitude -117.2954).
Temporal Representation:	Water samples were collected in March, April June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43602, Benthic Community Effects
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	3198
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 4 samples exceeding basin plan goal (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream and flowing waters.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station in Cottonwood Creek: 33.18147 -117.32893
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	
QAPP Information:	SWAMP Quality Assurance Plan
QAPP Information Reference(s):	

DECISION ID	43224	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.</p> <p>According to table 3.1 of the Listing Policy, the minimum sample requirement to assess conventional pollutants is 2.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 4 samples exceeded the Basin Plan objective and this does exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43224, Nitrogen	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID:	6551
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Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All 4 samples collected show excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Water samples were collected in March, April June, and September 2002.
Data Reference:	Water Quality Control Plan for the San Diego Basin
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Cottonwood Creek station 904CBCWC2; (Latitude 33.0486, Longitude -117.2954).
Temporal Representation:	Water samples were collected in March, April June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	44292	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Regional Board Conclusion:
This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the Basin Plan water quality goal of 0.1 mg/L in stream and flowing waters for Phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 4 samples exceeded the basin plan water quality goal and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 44292, Phosphorus
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

LOE ID:	3198
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 4 samples exceeding basin plan goal (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream and flowing waters.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station in Cottonwood Creek: 33.18147 -117.32893
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	
QAPP Information:	SWAMP Quality Assurance Plan
QAPP Information Reference(s):	

**DECISION ID 33129
Cottonwood Creek (San Marcos Creek watershed)**

Region 9

Pollutant: Turbidity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 24 samples exceeded the Basin Plan objective of more than 10% of the time during any one year period is 20 NTU. water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33129, Turbidity
Cottonwood Creek (San Marcos Creek watershed)

Region 9

LOE ID:	3196
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of Encinitas from 05/2002 to 09/2002. None of the 24 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the turbidity concentration not to be exceeded more than 10% of the time during any one year period is 20 NTU.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected along Cottonwood Creek at Third and B Streets. Samples were collected at 2 other locations from the creek to the mixing zone. The next location is post-treatment, but still part of the creek (and entered in the database as such) and the 3rd location is in the mixing zone and entered into the database as the Pacific Shoreline, San Marcos HA.

Temporal Representation:

Samples were collected from 05/28/2002 to 09/11/2002.

Environmental Conditions:

QAPP Information:

The Moonlight Beach Urban Runoff Treatment Facility Quality Assurance Project Plan, City of Encinitas. Refer Correspondence to Katherine Weldon. Considered an acceptable QAPP by the SWRCB.

QAPP Information Reference(s):

DECISION ID	46059	Region 9
Cottonwood Creek (San Marcos Creek watershed)		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Four of 4 samples exceed the CTR criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 46059, Selenium	Region 9
Cottonwood Creek (San Marcos Creek watershed)	

LOE ID:	8517
Pollutant:	Selenium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Cottonwood Creek station 2, 904CBCWC2 on March, April, June, and September 2002. All samples showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Cottonwood Creek station 2, 904CBCWC2; (Latitude 33.0486, Longitude -117.2954).
Temporal Representation:	Water samples were collected in March, April June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Marcos Creek](#)
Water Body ID: CAR9045100020011025132925
Water Body Type: River & Stream

DECISION ID	33035	Region 9
San Marcos Creek		

Pollutant: DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating chemical concentrations with sediment toxicity to assess listing status.

Two line of evidence is available in the administrative record to assess pollutant. Three of four of samples exceed the Basin Plan water quality objective, and Zero of One samples exceeded the Evaluation Guideline for DDE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of four of samples exceed the Basin Plan water quality objective, and Zero of One samples exceeded the Evaluation Guideline for DDE, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33035, DDE (Dichlorodiphenyldichloroethylene)	Region 9
San Marcos Creek	

LOE ID: 76136
Pollutant: DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33035, DDE (Dichlorodiphenyldichloroethylene)

Region 9

San Marcos Creek

LOE ID:	3211
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four samples; three samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxic Rule: Human Health-FW (water & organisms) .00059 mg/L.
	San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	One Station at San Marcos Creek: 33.13027 -117.192.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	34726	Region 9
San Marcos Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. Five of Nine samples exceed the Evaluation Guideline for sediment toxicity, and Six out of Nine samples exhibited water toxicity, and these samples correspond with Five out of Six samples that exceeded the Water Quality Criteria for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of Nine samples exceed the Evaluation Guideline for sediment toxicity, and Six out of Nine samples exhibited water toxicity, and these samples correspond with Five out of Six samples that exceeded the Water Quality Criteria for Selenium, and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34726, Toxicity	Region 9
San Marcos Creek	

LOE ID:	8878
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight water samples were collected at San Marcos Creek stations 904CBSAM6 on March, April, June and September 2002. Seven of eight samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Marcos Creek stations (904CBSAM6), and station (904CBSAM3) (Latitude 33.129985, Longitude -117.19242).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 34726, Toxicity

Region 9

San Marcos Creek

LOE ID:	3209
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 23, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total 'toxic' samples as it had a data qualifier. All samples were tested using the 10-day Hyallela azteca test (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).

Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All samples were collected from one station, San Marcos Creek 6.
Temporal Representation:	Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002 and September 17, 2002.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34726, Toxicity	Region 9
San Marcos Creek	

LOE ID:	76243
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 904CBSAM6.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34726, Toxicity	Region 9
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San Marcos Creek

LOE ID:	3208
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 23, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total 'toxic' samples as it had a data qualifier. All samples were tested using the 10-day Hyallela azteca test (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All samples were collected from one station, San Marcos Creek 3.
Temporal Representation:	Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 12, 2002 and September 18, 2002.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34726, Toxicity

Region 9

San Marcos Creek

LOE ID:	76242
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.

Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 904_SMC00729, San Marcos Creek.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 34726, Toxicity

Region 9

San Marcos Creek

LOE ID:	21385
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Total of eight samples were collected, four at San Marcos Creek station 904CBSAM3 and four at San Marcos Creek station 904CBSAM6. They showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - six of the eight samples. Ceriodaphnia dubia survival/reproductive test - four of the eight samples. Samples were collected in 2002. Tests results can be found in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013

Spatial Representation:	Samples were collected from stations San Marcos Creek 3 (904CBSAM3) and San Marcos Creek 6 (904CBSAM6).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	50055	Region 9
San Marcos Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50055, Arsenic		Region 9
San Marcos Creek		

LOE ID:	76058
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50099	Region 9
San Marcos Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Bifenthrin, one out of one samples exceeded the sediment chemistry guideline for Bifenthrin, and one out of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the One samples exceed the Water Quality Criteria for Bifenthrin, one out of one samples exceeded the sediment chemistry guideline for Bifenthrin, and one out of one samples exhibited sediment toxicity. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50099, Bifenthrin
San Marcos Creek**

Region 9

LOE ID:	76074
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 50099, Bifenthrin
San Marcos Creek**

Region 9

LOE ID:	78119
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 50099, Bifenthrin

Region 9

San Marcos Creek

LOE ID:	76243
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 904CBSAM6.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID	50106	Region 9
San Marcos Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the Water Quality Criteria for Cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of seven samples exceeded the Water Quality Criteria for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50106, Cadmium	Region 9
San Marcos Creek	

LOE ID: 76075

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected 7/20/2004 - 1/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50106, Cadmium

Region 9

San Marcos Creek

LOE ID:	76076
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50111	Region 9
San Marcos Creek		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating sediment concentrations with sediment toxicity to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline Chlordane for and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50111, Chlordane	Region 9
San Marcos Creek	

LOE ID:	72827
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 904CBSAM6 (San Marcos Creek 6).
Temporal Representation:	The samples were collected on 1/7/2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID		50116	Region 9
San Marcos Creek			
Pollutant:	Chlorpyrifos		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	New Decision		
Revision Status	Revised		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos, Zero out of Zero samples exceeded the sediment chemistry guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>		

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos, Zero out of Zero samples exceeded the sediment chemistry guideline for Chlorpyrifos, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50116, Chlorpyrifos
San Marcos Creek**

Region 9

LOE ID:	76095
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).Â
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 50116, Chlorpyrifos**Region 9****San Marcos Creek**

LOE ID:	76094
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected over the time period 9/23/2005-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID**50125****Region 9****San Marcos Creek**

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50125, Chromium
San Marcos Creek**

Region 9

LOE ID:	76096
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50133	Region 9
San Marcos Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the Thirteen samples exceed the Water Quality Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Three samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50133, Copper		Region 9
San Marcos Creek		

LOE ID:	76115
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

Data Reference:	<p>criterion for Copper.</p> Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected 7/20/2004 - 1/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50133, Copper

Region 9

San Marcos Creek

LOE ID:	76117
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the four samples exceeded the criteria. One of the samples was reported as "ND" without a reporting limit, therefore this data was not used in the assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from station LSM Creek (North end of lake), also called CAR4.
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through

2008.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed by the County of San Diego as part of their storm water program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50133, Copper
San Marcos Creek

Region 9

LOE ID: 76116

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality: One of the two samples exceeded the hardness adjusted criteria.
Data Reference: [Data for Various Pollutants in Region 9, 2002-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from San Marcos Creek at Site 3, a location downstream from Lake San Marcos (just outside the dam) and Site 7 which was obtained from San Marcos Creek in a location upstream of the lake.

Temporal Representation: Samples were collected on 5/18/2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50133, Copper
San Marcos Creek

Region 9

LOE ID: 76097

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50146	Region 9
San Marcos Creek		
Pollutant:	Cyfluthrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the Evaluation Guideline for Cyfluthrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the One samples exceed the Evaluation Guideline and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using 	

table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50146, Cyfluthrin

Region 9

San Marcos Creek

LOE ID:	76118
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

50158

Region 9

San Marcos Creek

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating sediment concentrations with sediment toxicity to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline .</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50158, Cyhalothrin, Lambda		Region 9
San Marcos Creek		
LOE ID:	76119	
Pollutant:	Cyhalothrin, Lambda	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.	
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).	

Guideline Reference: [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	50744	Region 9
San Marcos Creek		

Pollutant: Cypermethrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating chemical concentrations with sediment toxicity to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria, and Zero of the One samples exceeded the Evaluation Guideline for Cypermethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria, and Zero of the One samples exceeded the Evaluation Guideline for Cypermethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50744, Cypermethrin	Region 9
San Marcos Creek	

LOE ID: 76134

Pollutant: Cypermethrin

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 50744, Cypermethrin

Region 9

San Marcos Creek

LOE ID:	78122
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

Objective/Criterion Reference:	life (Water Quality Control Plan for the San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50156	Region 9
San Marcos Creek		

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating sediment concentrations with sediment toxicity to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50156, DDD (Dichlorodiphenyldichloroethane)	Region 9
San Marcos Creek	

LOE ID: 76135

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50157	Region 9
San Marcos Creek		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an addition line of evidence is necessary associating sediment concentrations with sediment toxicity to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for DDT (Dichlorodiphenyltrichloroethane).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of One samples exceeded the Evaluation Guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50157, DDT (Dichlorodiphenyltrichloroethane)		Region 9
San Marcos Creek		
LOE ID:	76153	
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.	
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).	
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]	
Temporal Representation:	Data was collected on a single day 1/7/2007.	
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.	
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.	
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)	

DECISION ID	50160	Region 9
San Marcos Creek		
Pollutant:	Deltamethrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final	New Decision	

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating sediment concentrations with sediment toxicity to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Deltamethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Deltamethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50160, Deltamethrin
San Marcos Creek**

Region 9

LOE ID: 76154

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al.

Guideline Reference: (2005). [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	50161	Region 9
San Marcos Creek		

Pollutant: Diazinon

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Diazinon and zero of the one samples exceeded the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria and zero of the one samples exceeded the evaluation guideline for Dazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50161, Diazinon	Region 9
San Marcos Creek	

LOE ID: 76155

Pollutant: Diazinon

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected over the time period 9/23/2005-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50161, Diazinon

Region 9

San Marcos Creek

LOE ID:	76156
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).Â
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50162	Region 9
San Marcos Creek		

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the sediment chemistry guideline for Dieldrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the One samples exceed the sediment chemistry guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50162, Dieldrin	Region 9
San Marcos Creek	

LOE ID:	76157
Pollutant:	Dieldrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50163	Region 9
San Marcos Creek		
Pollutant:	Endrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the sediment chemistry guideline for Endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceeded the valuation guideline and this sample size is insufficient to 	

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50163, Endrin

Region 9

San Marcos Creek

LOE ID:	76172
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

50165

Region 9

San Marcos Creek

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceeded the Evaluation Guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceeded the Evaluation Guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50165, Esfenvalerate/Fenvalerate
San Marcos Creek

Region 9

LOE ID: 76176

Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for

Guideline Reference:	esfenvalerate/fenvalerate from Amweg et al. (2005). Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50166	Region 9
San Marcos Creek		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one samples exceeded the Evaluation Guideline for Fenpropathrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the Evaluation Guideline for Fenpropathrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50166, Fenpropathrin	Region 9
San Marcos Creek	

LOE ID:	76193
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50168	Region 9
San Marcos Creek		

Pollutant:	Fipronil
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceeded the Evaluation Guideline for Fipronil</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceeded the evaluation guideline for fipronil and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50168, Fipronil

Region 9

San Marcos Creek

LOE ID:	76194
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID

50169

Region 9

San Marcos Creek

Pollutant:

Fipronil Sulfide

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating chemical concentrations with sediment toxicity to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Evaluation Guideline for Fipronil Sulfide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Evaluation Guideline for Fipronil Sulfide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50169, Fipronil Sulfide
San Marcos Creek**

Region 9

LOE ID: 76195

Pollutant: Fipronil Sulfide
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16

Guideline Reference:	ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008). Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50170	Region 9
San Marcos Creek		

Pollutant:	Fipronil Sulfone
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceeded the Evaluation Guideline for Fipronil Sulfone.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the Zero samples exceeded the Evaluation Guideline for Fipronil Sulfone and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50170, Fipronil Sulfone	Region 9
San Marcos Creek	

LOE ID:	76196
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50172	Region 9
San Marcos Creek		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. One of the Twelve samples exceeded the Water Quality Criteria for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. One of the Twelve samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50172, Lead
San Marcos Creek**

Region 9

LOE ID:	76210
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the four samples exceeded the criteria. One of the samples was reported as "ND" without a reporting limit, therefore this data was not used in the assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from station LSM Creek at North end of lake (CAR4).
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 50172, Lead
San Marcos Creek**

Region 9

LOE ID: 76197

Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 50172, Lead

Region 9

San Marcos Creek

LOE ID:	76208
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected 7/20/2004 - 1/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50172, Lead

Region 9

San Marcos Creek

LOE ID:	76209
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	The one sample exceeded the hardness adjusted criteria. An additional sample result was reported as "ND", no reporting limit was provided with the data, so it could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Marcos Creek at Site 3, a location downstream from Lake San Marcos (just outside the dam) and Site 7 which was obtained from San Marcos Creek in a location upstream of the lake.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control

DECISION ID	50177	Region 9
San Marcos Creek		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical sediment concentrations with sediment toxicity is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50177, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
San Marcos Creek	

LOE ID: 76211

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use

Data Reference:	support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50178	Region 9
San Marcos Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

San Marcos Creek

LOE ID:	76212
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected over the time period 9/23/2005-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

50745

Region 9

San Marcos Creek

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Criteria for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Water Quality Criteria for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50745, Nickel
San Marcos Creek**

Region 9

LOE ID:	76223
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

San Marcos Creek

LOE ID:	76224
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the two samples exceeded the hardness adjusted criteria.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Marcos Creek at Site 3, a location downstream from Lake San Marcos (just outside the dam) and Site 7 which was obtained from San Marcos Creek in a location upstream of the lake.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.
QAPP Information Reference(s):	

DECISION ID

50746

Region 9

San Marcos Creek

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the Five samples exceed the water Quality Objective for Oxygen, Dissolved.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of Five samples exceeded the Water Quality Objective for Oxygen, Dissolved and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50746, Oxygen, Dissolved
San Marcos Creek**

Region 9

LOE ID:	76225
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 5 minimums of Dissolved Oxygen concentrations had 3 exceedences.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations 3, 7, and LSM-40.
Temporal Representation:	Samples were collected thrice in 2007 and twice in 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

**DECISION ID 50747
San Marcos Creek**

Region 9

Pollutant: Permethrin, total

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating chemical concentrations with sediment toxicity to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Permethrin, Total.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Permethrin, Total and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50747, Permethrin, total
San Marcos Creek

Region 9

LOE ID: 76226

Pollutant: Permethrin, total
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9

ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).

Guideline Reference:

[Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation:

Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]

Temporal Representation:

Data was collected on a single day 1/7/2007.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s):

[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	50749	Region 9
San Marcos Creek		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the Nine samples exceed the Water Quality Objective for Temperature, water.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Four of Nine samples exceeded the Water Quality Objective for Temperature, water and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 50749, Temperature, water	Region 9
San Marcos Creek	

LOE ID:	76228
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of the 9 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129). Since there is no evaluation guideline for assessing temperature for the warm freshwater aquatic life beneficial use, this line of evidence will not be used for Listing Decisions in the 2012 Integrated Report and will be retired for said Listing cycle.
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA. Davis
Spatial Representation:	Samples were collected at station BTQ-02-Box Canyon Dam (downstream at bank).
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

DECISION ID	50748	Region 9
San Marcos Creek		
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary associating chemical concentrations with sediment toxicity to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50748, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

San Marcos Creek

LOE ID: 76241

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]

Temporal Representation: Data was collected on a single day 1/7/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 50750

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence is available in the administrative record to assess this pollutant. One of the 13 samples exceed the Water Quality Criteria for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 13 samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50750, Zinc

Region 9

San Marcos Creek

LOE ID: 76255

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the two samples exceeded the hardness adjusted criteria.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Marcos Creek at Site 3, a location downstream from Lake San Marcos (just outside the dam) and Site 7 which was obtained from San Marcos Creek in a location upstream of the lake.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50750, Zinc		Region 9
San Marcos Creek		
LOE ID:	76254	
Pollutant:	Zinc	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	6	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.	
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]	
Temporal Representation:	Data was collected 7/20/2004 - 1/11/2009.	
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.	
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.	
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.	
Line of Evidence (LOE) for Decision ID 50750, Zinc		Region 9

San Marcos Creek

LOE ID:	76256
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	One of the four samples exceeded the criteria. One of the samples was reported as "ND" without a reporting limit, therefore this data was not used in the assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from station LSM Creek (North end of lake), also called CAR4.
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50750, Zinc

Region 9

San Marcos Creek

LOE ID:	76253
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Marcos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek - 904_SMC00729]

Temporal Representation:

Data was collected on a single day 6/3/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	50751	Region 9
San Marcos Creek		

Pollutant:
Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

pH
Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

San Marcos Creek

LOE ID:	76227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of the 4 samples exceeded the objective. The sample collected from site LSM-40 6/23/2007 is a clerical error as the pH reading is 25.53.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the 3, 7, and LSM - 40 stations.
Temporal Representation:	Samples were collected thrice in 2007 and once in 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID

43723

Region 9

San Marcos Creek

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID:	8878
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight water samples were collected at San Marcos Creek stations 904CBSAM6 on March, April, June and September 2002. Seven of eight samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Marcos Creek stations (904CBSAM6), and station (904CBSAM3) (Latitude 33.129985, Longitude -117.19242).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID:	72767
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Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	14
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Fourteen of the 14 samples collected had IBI scores below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The samples were collected at stations SMC-LCCC, SMC-M, SMC-RSFR, SMC-SP, and SM-TWAS-1b San Marcos Creek.
Temporal Representation:	The samples were collected twice a year in May and October from 2001 to 2002.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

**Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects
San Marcos Creek**

Region 9

LOE ID:	76074
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Marcos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek 6 - 904CBSAM6]
Temporal Representation:	Data was collected on a single day 1/7/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID:	76243
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental

Spatial Representation: The sample was collected at station 904CBSAM6.
 Temporal Representation: The sample was collected in January 2007.
 Environmental Conditions:
 QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID: 79694

Pollutant: Benthic-Macroinvertebrate Bioassessments
 LOE Subgroup: Population/Community Degradation
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
 Number of Exceedances: 6

Data and Information Type: Benthic macroinvertebrate surveys
 Data Used to Assess Water Quality: Seven samples were taken at three locations on San Marcos Creek above San Marcos reservoir. Six samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)
[Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)
[Region 9 CSCI Scores & Water Body Information](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference: [The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation: The samples was collected at: 904SMC-M, SMC00729, 904SMC-SP
 Temporal Representation: The samples were collected in 2001, 2002, and 2009.
 Environmental Conditions:
 QAPP Information: The data was collected under the the County of San Diego NPDES MS4 Copermittees

QAPP Information Reference(s): Receiving Waters Monitoring and Reporting Program and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
[e-mail clarifying QAPP information](#)
[Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)
[Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID:	79693
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight samples were taken at two stations on San Marcos Creek below San Marcos reservoir. The CSCI scores for are above the 0.79 threshold, and therefore the site is not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The samples were collected at stations 904SMC-LCCC and 904SMC-RSFR
Temporal Representation:	The samples were collected twice a year in May and October from 2001 to 2004.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects**Region 9****San Marcos Creek**

LOE ID:	76116
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	One of the two samples exceeded the hardness adjusted criteria.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Marcos Creek at Site 3, a location downstream from Lake San Marcos (just outside the dam) and Site 7 which was obtained from San Marcos Creek in a location upstream of the lake.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects**Region 9****San Marcos Creek**

LOE ID:	21385
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Total of eight samples were collected, four at San Marcos Creek station 904CBSAM3and

four at San Marcos Creek station 904CBSAM6. They showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - six of the eight samples. Ceriodaphnia dubia survival/reproductive test -four of the eight samples. Samples were collected in 2002. Tests results can be found in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013](#)

Spatial Representation: Samples were collected from stations San Marcos Creek 3 (904CBSAM3) and San Marcos Creek 6 (904CBSAM6).

Temporal Representation: Samples were collected on March, April, June and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID: 27029

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 14
Number of Exceedances: 14

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Fourteen samples of IBI data were taken from May 2001 to October 2004 at four sampling sites. Of the total number of samples, all fourteen of the samples exceeded the IBI impairment threshold.

Data Reference: [Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring

range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at four sites: SMC-LCCC, SMC-M, SMC-RSFR, and SMC-SP on San Marcos Creek.

Temporal Representation: Sampling occurred during May and October annually over a two year period from May 2001 to October 2002 and during October 2004.

Environmental Conditions:
QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.

QAPP Information Reference(s): [Quality Assurance Manual for Freshwater Bioassessment Revision 0](#)

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID: 26446

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 24

Number of Exceedances: 24

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Twenty four samples of IBI data were taken from May 1998 to November 2000 at four sampling sites. Of the total number of samples, all twenty four samples exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at four sites: 904SMCLCC, 904SMCMxx, 904SMCRSF, and 904SMCSPx on San Marcos Creek.

Temporal Representation: Sampling occurred during one to seven events annually from May 1998 to November 2000.

Environmental Conditions:
QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the

QAPP Information Reference(s):

[State of California, California Monitoring and Assessment Program: "CMAP".](#)
[Quality Assurance Project Plan for the California Stream Bioassessment Procedure](#)
[The San Diego Stream Team Quality Assurance Project Plan](#)

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects
San Marcos Creek

Region 9

LOE ID:	3209
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 23, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total 'toxic' samples as it had a data qualifier. All samples were tested using the 10-day Hyallela azteca test (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All samples were collected from one station, San Marcos Creek 6.
Temporal Representation:	Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002 and September 17, 2002.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects
San Marcos Creek

Region 9

LOE ID:	3207
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores for SMC-LCCC ranged from 104 to 132, higher scores compared to other sampled waterbodies. BMI scores were near average for the sampling months (3 at or slightly above, 1 slightly below). (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Marcos Creek, 5 riffles downstream of Rancho Santa Fe Rd (SMC-LCCC).
Temporal Representation:	Samples were collected in May, September, November 1998 and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID:	3206
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores ranged from 108 to 128, higher scores compared to other sampled waterbodies. BMI scores were either at, slightly above, or slightly below average. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Marcos Creek, 5 riffles 50m upstream of McMahr Rd intersection (SMC-RSFR).
Temporal Representation:	Samples were collected in May, September, November 1998, and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects**Region 9****San Marcos Creek**

LOE ID:	3205
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores for SMC-SP ranged from 90 to 120, moderate scores, compared to other sampled waterbodies. BMI scores were below average. In May and September 1998, the scores were just slightly below average, but decreased further below average in November 1998 and May 1999. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Marcos Creek, 5 riffles downstream of Santar Place (SMC-SP).
Temporal Representation:	Samples were collected in May, September, November 1998 and in May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects**Region 9****San Marcos Creek**

LOE ID:	3204
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Samples were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores at SMC-M ranged from 107 to 126, moderate compared to other sampled waterbodies. BMI scores were above and below average. Of the 4 scores, 3 were below average, and 1 was above. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at San Marcos Creek, 5 riffles 50m upstream of McMahr Rd. intersection (SMC-M).
Temporal Representation:	Samples were collected in May, September, November 1998, and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects
San Marcos Creek

Region 9

LOE ID:	3208
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 23, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total 'toxic' samples as it had a data qualifier. All samples were tested using the 10-day Hyallela azteca test (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	All samples were collected from one station, San Marcos Creek 3.
Temporal Representation:	Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 12, 2002 and September 18, 2002.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects
San Marcos Creek

Region 9

LOE ID:	3211
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four samples; three samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxic Rule: Human Health-FW (water & organisms) .00059 mg/L. San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One Station at San Marcos Creek: 33.13027 -117.192.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.51.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects
San Marcos Creek

Region 9

LOE ID:	3210
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Eight water samples, eight samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L in stream and flowing waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Two stations at San Marcos Creek: 33.13027 - 117.192 and at 33.08791 - 117.26933.
Temporal Representation: Eight samples collected from March through September of 2002.
Environmental Conditions: San Marcos Creek Watershed 904.5.
QAPP Information: SWAMP Quality Assurance Plan.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID: 76060

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: The one sample collected had an IBI score below 40. The score was 4.3. SMC bioassessment
Data Reference: [Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:

Spatial Representation: The sample was collected at 904_SMC00729, San Marcos Creek .
Temporal Representation: The sample was collected in June 2009.
Environmental Conditions:
QAPP Information: The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 43723, Benthic Community Effects

Region 9

San Marcos Creek

LOE ID: 76209

Pollutant: Lead

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	The one sample exceeded the hardness adjusted criteria. An additional sample result was reported as "ND", no reporting limit was provided with the data, so it could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Marcos Creek at Site 3, a location downstream from Lake San Marcos (just outside the dam) and Site 7 which was obtained from San Marcos Creek in a location upstream of the lake.
Temporal Representation:	Samples were collected on 5/18/2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the San Diego Regional Water Quality Control Board.
QAPP Information Reference(s):	

DECISION ID	53496	Region 9
San Marcos Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Ten of 14 and 6 of 16 single samples exceed the water quality objectives for enterococcus (fresh water) and fecal coliform for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>
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sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 14 and 6 of 16 single samples exceed the water quality objectives for enterococcus (fresh water) and fecal coliform for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 53496, Indicator Bacteria
San Marcos Creek**

Region 9

LOE ID:	76177
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 53496, Indicator Bacteria
San Marcos Creek**

Region 9

LOE ID: 76178

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the ten samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The fecal coliform concentration shall not exceed 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 3 and 7, CAR04, and LSM-40. All samples were upstream of Lake San Marcos except for Station 3 which is downstream of the dam at the lake.
Temporal Representation:	Samples were collected from July 2004 to May 2009.
Environmental Conditions:	
QAPP Information:	Data was a combination of Regional Board Lab data, County of San Diego Watershed Protection Program Lab data, and citizen group Lake San Marcos Task Force data. No QAPP documents were included.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53496, Indicator Bacteria
San Marcos Creek

Region 9

LOE ID:	76175
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Both samples exceeded the E. Coli objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E. Coli concentration shall not exceed more than 235/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 3 and 7. Station 3 is downstream of the dam at the lake. Station 7 is upstream of the lake.

Temporal Representation: Samples were collected on May 18, 2009.
Environmental Conditions:
QAPP Information: No QAPP documents were included with the Regional Board Lab data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 53496, Indicator Bacteria
San Marcos Creek

Region 9

LOE ID: 76173

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 5

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Enterococci.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]

Temporal Representation: Data was collected over the time period 7/20/2004-6/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53496, Indicator Bacteria
San Marcos Creek

Region 9

LOE ID: 76174

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 8
Number of Exceedances: 5

Data and Information Type: Not Specified

Data Used to Assess Water Quality:	Five of the eight samples exceeded the enterococcus objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The enterococcus concentration shall not exceed 61/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 3 and 7, CAR04, and LSM-40. All samples were upstream of Lake San Marcos except for Station 3 which is downstream of the dam at the lake.
Temporal Representation:	Samples were collected from July 2004 to May 2009.
Environmental Conditions:	
QAPP Information:	Data was a combination of Regional Board Lab data, County of San Diego Watershed Protection Program Lab data, and citizen group Lake San Marcos Task Force data. No QAPP documents were included.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53496, Indicator Bacteria
San Marcos Creek

Region 9

LOE ID:	76239
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Marcos Creek was collected at 1 monitoring site [San Marcos Creek @ Discovery Street]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

Line of Evidence (LOE) for Decision ID 53496, Indicator Bacteria
San Marcos Creek
Region 9

LOE ID:	76240
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the nine samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The total coliform concentration shall not exceed 10000/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Stations 3 and 7, CAR04, and LSM-40. All samples were upstream of Lake San Marcos except for Station 3 which is downstream of the dam at the lake.
Temporal Representation:	Samples were collected from July 2004 to May 2009.
Environmental Conditions:	
QAPP Information:	Data was a combination of Regional Board Lab data, County of San Diego Watershed Protection Program Lab data, and citizen group Lake San Marcos Task Force data. No QAPP documents were included.
QAPP Information Reference(s):	

DECISION ID 37435**Region 9****San Marcos Creek**

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of two of the samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of two of the samples exceed the Basin Plan water quality objective for total dissolved solids, and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 26 samples is needed for application of table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37435, Total Dissolved Solids
San Marcos Creek**

Region 9

LOE ID:	3200
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at San Marcos Creek at McMahr.
Temporal Representation:	Sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 37435, Total Dissolved Solids
San Marcos Creek**

Region 9

LOE ID:	3201
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at San Marcos Creek at Rancho Santa Fe Rd.
Temporal Representation:	Sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33523	Region 9
San Marcos Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the Basin Plan water quality objective for turbidity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Basin Plan water quality objective for turbidity, and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33523, Turbidity
San Marcos Creek**

Region 9

LOE ID:	3202
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at San Marcos Creek at Rancho Santa Fe Rd.
Temporal Representation:	Sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33523, Turbidity
San Marcos Creek**

Region 9

LOE ID:	3203
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. 1 sample was collected and was not in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Marcos Creek at McMahr.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33514	Region 9
San Marcos Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for addition to the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Eight of eight of samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination to the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of eight of samples exceed the Basin Plan water quality objective for phosphorus, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33514, Phosphorus	Region 9
San Marcos Creek	

LOE ID:	3210
Pollutant:	Phosphorus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Eight water samples, eight samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisances or adversely affects beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L in stream and flowing waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Two stations at San Marcos Creek: 33.13027 - 117.192 and at 33.08791 - 117.26933.
Temporal Representation:	Eight samples collected from March through September of 2002.
Environmental Conditions:	San Marcos Creek Watershed 904.5.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	43708	Region 9
San Marcos Creek		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Seven of eight of the samples exceed the California Toxics Rule water quality objective for selenium, and these samples correspond with six out of eight samples that exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of eight of the samples exceed the California Toxics Rule water quality objective for selenium, and these samples correspond with six out of eight samples that exhibited water toxicity, and this

exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43708, Selenium

Region 9

San Marcos Creek

LOE ID:	8878
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight water samples were collected at San Marcos Creek stations 904CBSAM6 on March, April, June and September 2002. Seven of eight samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Marcos Creek stations (904CBSAM6), and station (904CBSAM3) (Latitude 33.129985, Longitude -117.19242).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey. CA

Line of Evidence (LOE) for Decision ID 43708, Selenium

Region 9

San Marcos Creek

LOE ID:	21385
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Total of eight samples were collected, four at San Marcos Creek station 904CBSAM3 and four at San Marcos Creek station 904CBSAM6. They showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - six of the eight samples. Ceriodaphnia dubia survival/reproductive test - four of the eight samples. Samples were collected in 2002. Tests results can be found in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	Samples were collected from stations San Marcos Creek 3 (904CBSAM3) and San Marcos Creek 6 (904CBSAM6).
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Reidy Canyon Creek](#)
Water Body ID: CAR9046200020010927085916
Water Body Type: River & Stream

DECISION ID	48531	Region 9
Reidy Canyon Creek		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the objectives this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48531, Ammonia	Region 9
Reidy Canyon Creek	

LOE ID: 75514
Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 3
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2003-6/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48515	Region 9
Reidy Canyon Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the objective for protection of Aquatic Life and zero of eight samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48515, Cadmium

Region 9

Reidy Canyon Creek

LOE ID: 75515

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]

Temporal Representation: Data was collected over the time period 5/22/2004-6/10/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48515, Cadmium

Region 9

Reidy Canyon Creek

LOE ID: 75516

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2004-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48523	Region 9
Reidy Canyon Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the objective for protection of Aquatic Life and zero of four samples exceed the guideline for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the objectives and zero of four samples exceed the guideline, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48523, Chlorpyrifos

Region 9

Reidy Canyon Creek

LOE ID:	75517
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 1 monitoring site [Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 6/27/2006-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48523, Chlorpyrifos

Region 9

Reidy Canyon Creek

LOE ID:	78083
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 1 monitoring site [Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 6/27/2006-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48516	Region 9
Reidy Canyon Creek		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the objective for protection of Aquatic Life and zero of eight samples exceed the objective for protection of the drinking water beneficial use (MUN).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48516, Copper

Region 9

Reidy Canyon Creek

LOE ID: 75519

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]

Temporal Representation: Data was collected over the time period 5/22/2004-6/10/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48516, Copper

Region 9

Reidy Canyon Creek

LOE ID: 75518

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2004-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48522	Region 9
Reidy Canyon Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective for protection of Aquatic Life and zero of four samples exceed the guideline for protection of the drinking water beneficial use (MUN).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the objectives and guideline, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48522, Diazinon

Region 9

Reidy Canyon Creek

LOE ID:	78084
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 1 monitoring site [Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 6/27/2006-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48522, Diazinon

Region 9

Reidy Canyon Creek

LOE ID:	75520
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 1 monitoring site [Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 6/27/2006-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48517	Region 9
Reidy Canyon Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the objective for protection of Aquatic Life and zero of eight samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48517, Lead**Region 9****Reidy Canyon Creek**

LOE ID:	75526
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2004-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48517, Lead**Region 9****Reidy Canyon Creek**

LOE ID:	75525
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2004-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48520	Region 9
Reidy Canyon Creek		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the objective for protection of Aquatic Life and zero of four samples exceed the guideline for protection of the drinking water beneficial use (MUN).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Reidy Canyon Creek

LOE ID:	75527
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 1 monitoring site [Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 6/27/2006-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48520, Malathion

Region 9

Reidy Canyon Creek

LOE ID:	78085
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 1 monitoring site [Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 6/27/2006-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48528	Region 9
Reidy Canyon Creek		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the fone samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the objectives this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48528, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
Reidy Canyon Creek	

LOE ID:	75528
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 1 monitoring site [Reidy Canyon Creek @ Bachelor Lane]
Temporal Representation:	Data was collected on a single day 5/23/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	43957	Region 9
Reidy Canyon Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence is available in the administrative record to assess this pollutant. Zeror of the five samples exceeded the Basin Plan water quality objective for nitrite.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of the two the samples exceeded the Basin Plan water quality objective for nitrite and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 43957, Nitrogen, Nitrite
Reidy Canyon Creek**

Region 9

LOE ID:	3213
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected in Reidy Creek at the Mountain Meadow Mushroom Farm on 3/12/01. Two samples were collected; one upstream and one downstream. Both samples were ND. The detection limit is below the WQO. (SDRWQCB, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the numeric objective for Nitrate as N is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Two samples were collected, one upstream and one downstream, near Mountain Meadow Mushroom Farm on 3/12/2001.
Temporal Representation:	Samples were collected once on 3/12/2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43957, Nitrogen, Nitrite
Reidy Canyon Creek**

Region 9

LOE ID:	75529
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2003-5/23/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48518	Region 9
Reidy Canyon Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the objective for protection of Aquatic Life and zero of eight samples exceed the objective for protection of the drinking water beneficial use (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48518, Zinc**Region 9****Reidy Canyon Creek**

LOE ID:	75531
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2004-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48518, Zinc**Region 9****Reidy Canyon Creek**

LOE ID:	75532
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]

Temporal Representation: Data was collected over the time period 5/22/2004-6/10/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48532	Region 9
Reidy Canyon Creek		

Pollutant: **Indicator Bacteria**

Final Listing Decision: **List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2027

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the nine samples exceed the objective for enterococcus. Four of nine samples exceed the objective for fecal coliform and two of nine samples exceed the objective for total coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of nine samples exceed the objectives for enterococcus and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48532, Indicator Bacteria**Region 9****Reidy Canyon Creek**

LOE ID:	75524
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2003-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48532, Indicator Bacteria**Region 9****Reidy Canyon Creek**

LOE ID:	75530
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2003-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48532, Indicator Bacteria

Region 9

Reidy Canyon Creek

LOE ID:	75523
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Reidy Canyon Creek to determine beneficial use support and results are as follows: 7 of 9 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Reidy Canyon Creek was collected at 2 monitoring sites [Reidy Canyon Creek @ Bachelor Lane, Reidy Canyon Creek @ Paseo Del Norte]
Temporal Representation:	Data was collected over the time period 5/22/2003-7/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of two of samples exceeded the Basin Plan water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of two of samples exceeded the Basin Plan water quality objective for phosphorus, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 32634, Phosphorus	Region 9
Reidy Canyon Creek	

LOE ID:	3214
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected on 3/12/2001 at Reidy Creek near Mountain Meadow Mushroom Farm at two locations; one upstream and one downstream. Samples in exceedance: 2 of 2 (SDRWQCB, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan, the WQO for Total Phosphorus for inland surface waters-streams and other flowing waters is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Reidy Creek near Mountain Meadow Mushroom Farm at one upstream location and one downstream location.
Temporal Representation:	One sample was taken at each location on one day, 3/12/2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	32605	Region 9
Reidy Canyon Creek		

Pollutant:	Nitrogen
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of two of the samples exceed the Basin Plan water quality objective for total nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of two of the samples exceed the Basin Plan water quality objective for total nitrogen and this sample size is insufficient to determine with the power and confidence of the Listing Policy. A minimum of 16 samples is needed to determine if beneficial uses are fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 32605, Nitrogen		Region 9
Reidy Canyon Creek		

LOE ID:	3212
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at Reidy Creek near Mountain Meadow Mushroom Farm on 3/12/2001. Two samples were collected; one upstream and one downstream. In 1 of 2 samples, the N:P ratio exceeds 10:1. The exceedance occurs in the upstream sample. Both phosphorus samples are in exceedance. (SDRWQCB, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, Narrative Objective for Biostimulatory Substances: Inland surface waters, bays and estuaries, and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Narrative Objective for Nitrogen: Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data was collected in Reidy Creek near the Mountain Meadow Mushroom Farm at one upstream and one downstream location.
Temporal Representation:	Data was collected on 3/12/2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	32624	Region 9
Reidy Canyon Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of two of the samples exceed the Basin Plan water quality objective for turbidity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list</p>

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of two of the samples exceed the Basin Plan water quality objective for turbidity, and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32624, Turbidity

Region 9

Reidy Canyon Creek

LOE ID:	3215
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was obtained from samples collected on 3/12/2001 in Reidy Creek near the Mountain Meadow Mushroom Farm. One upstream sample and one downstream sample were collected. For the MUN beneficial use, 2 of 2 samples are in exceedance (SDRWQCB, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the Turbidity WQO for inland surface water with Municipal (MUN) Beneficial Uses is 5 units. The Turbidity WQO for inland surface waters with all other beneficial uses is 20 NTU. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Two samples, one upstream and one downstream, were collected at Reidy Creek near the Mountain Meadow Mushroom Farm.
Temporal Representation:	Samples were collected once on 3/12/2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Escondido Creek](#)
Water Body ID: CAR9046200020011005134542
Water Body Type: River & Stream

DECISION ID	42668	Region 9
Escondido Creek		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Thirty-two of the 33 samples exceed the Single Sample Maximum Objective for Enterococcus, 26 out of 33 samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Five out of 18 samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-two of the 33 samples exceed the Single Sample Maximum Objective for Enterococcus, 26 out of 33 samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Five out of 18 samples exceeded the Single Sample Maximum Guideline for Total Coliform and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42668, Indicator Bacteria	Region 9
Escondido Creek	

LOE ID: 73593
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 11 of 18 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/10/2003-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 42668, Indicator Bacteria Escondido Creek

Region 9

LOE ID:	7364
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Monitoring Report, 2007. Samples were collected one to three times a year from 2001 - 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the limit for enterococcus sets a maximum at 61 colonies per 100mL (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Camino Del Norte Bridge east of Rancho Santa Fe Road along a natural channel in Encinitas.
Temporal Representation:	Samples were collected one to three times a year from 2001 - 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the City of San Diego's quality assurance program.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

Line of Evidence (LOE) for Decision ID 42668, Indicator Bacteria

Region 9

Escondido Creek

LOE ID:	7365
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Monitoring Report, 2007. Samples were collected one to three times a year from 2001 - 2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Camino Del Norte Bridge east of Rancho Santa Fe Road along a natural channel in Encinitas.
Temporal Representation:	Samples were collected one to three times a year from 2001 - 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the City of San Diego's quality assurance program.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

Line of Evidence (LOE) for Decision ID 42668, Indicator Bacteria

Region 9

Escondido Creek

LOE ID:	73589
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18

Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 17 of 18 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/10/2003-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 42668, Indicator Bacteria

Region 9

Escondido Creek

LOE ID:	73552
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]

Data was collected over the time period 6/10/2003-6/18/2009.

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	44424	Region 9
Escondido Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Seven lines of evidence are available in the administrative record to assess this pollutant. Eight out of the thirty-six samples exceeded water quality objective for Selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Eight of 36 samples exceeded the CTR freshwater criterion and this exceeds the allowable frequency listed in Table 3.1 on the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44424, Selenium	Region 9
Escondido Creek	

LOE ID:	73522
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44424, Selenium

Region 9

Escondido Creek

LOE ID:	73660
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.05 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44424, Selenium

Region 9

Escondido Creek

LOE ID:	81141
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Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed data available from CEDEN for Escondido Creek from the SWAMP Program (RWB9 Rotational Monitoring 2002).
Data Reference:	Selenium data from SWAMP RWB9 Monitoring for placeholder LOE # 3231 downloaded from CEDEN 6/2/2016
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA Surface Water Ambient Monitoring Program Quality Assurance Program Plan
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [904CBESC5 and 904CBESC8].
Temporal Representation:	Data was collected over the time period 3/13/2002 - 9/18/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	At this time, the SWAMP Quality Assurance Management Plan v.1 12/22/02 was being developed and addresses SWAMP samples collected prior to its publication date.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44424, Selenium
Escondido Creek

Region 9

LOE ID:	81147
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed data available from CEDEN for Escondido Creek from the SWAMP Program (RWB9 Rotational Monitoring 2002).
Data Reference:	Selenium data from SWAMP RWB9 Monitoring for placeholder LOE # 3231 downloaded from CEDEN 6/2/2016
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.05 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [904CBESC5 and 904CBESC8].

Temporal Representation: Data was collected over the time period 3/13/2002 - 9/18/2002.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: At this time, the SWAMP Quality Assurance Management Plan v.1 12/22/02 was being developed and addresses SWAMP samples collected prior to its publication date.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

Line of Evidence (LOE) for Decision ID 44424, Selenium	Region 9
Escondido Creek	

LOE ID: 3231

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 12

Number of Exceedances: 8

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Twelve water samples, eight samples exceeding (SWAMP, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 mg/l.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Two stations at Escondido Creek ESC5, HBA 904.62 (33.08559 -117.15037) and ESC8, HBA 904.61 (33.03393 -117.23565).

Temporal Representation: Twelve samples collected from March through September of 2002.

Environmental Conditions: Escondido Creek Watershed; Escondido Creek 904.61 and 904.62

QAPP Information: SWAMP Quality Assurance Plan.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44424, Selenium	Region 9
Escondido Creek	

LOE ID: 77730

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for selenium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44424, Selenium

Region 9

Escondido Creek

LOE ID:	77731
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [

Temporal Representation:	Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Environmental Conditions:	Data was collected over the time period 11/29/2001-11/4/2008.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44424, Selenium	Region 9
Escondido Creek	

LOE ID:	3230
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44424, Selenium	Region 9
Escondido Creek	

LOE ID:	6246
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the 18 samples exceeded the water quality objective. Samples were collected by the City of Escondido for monitoring of Escondido Creek. Samples were collected quarterly in 2003 through 2005.
Data Reference:	City of Escondido. 2007. Baseline quarterly monitoring report for Calendar Years 1998-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the selenium water quality objective is 0.05 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 5 monitoring stations within Escondido Creek. Sample stations locations were Station 910, 912, 916, 917, and 923. Stations 912 and 916 were grouped as one station due to close proximity.
Temporal Representation:	Samples were collected quarterly in 2003 through 2005
Environmental Conditions:	Samples were collected during dry weather.
QAPP Information:	Samples were collected and analyzed in compliance with the City of Escondido's Quality Assurance Program 2009.
QAPP Information Reference(s):	City of Escondido. 2009. Quality Assurance Program. City of Escondido Water Quality Lab. January 2009

DECISION ID	34087	Region 9
Escondido Creek		

Pollutant:	Sulfates
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Nine of ten samples exceed the water quality objective for sulfate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of ten samples exceed the drinking water secondary MCL for sulfate and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34087, Sulfates**Region 9****Escondido Creek**

LOE ID:	3243
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by DWR from 1998 to 2000. Four of 5 samples were in exceedance (S.D. Department of Water Resources, 2000).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek near Harmony Grove.
Temporal Representation:	Samples were collected once each in May and November each year from 05/1998 to 05/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34087, Sulfates**Region 9****Escondido Creek**

LOE ID:	73541
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 34087, Sulfates

Region 9

Escondido Creek

LOE ID:	3244
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four water samples, four samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l with an upper limit of 500 (Basin Plan).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station at Escondido Creek: 33.03393 -117.23565.
Temporal Representation:	Four samples were collected from March through September of 2002.
Environmental Conditions:	Escondido Creek Watershed; Escondido Creek 904.61.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34087, Sulfates

Region 9

Escondido Creek

LOE ID:	73543
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 34087, Sulfates

Region 9

Escondido Creek

LOE ID:	73542
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Ten of the 51 samples exceed the water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 51 samples exceed the toxicity water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42803, Toxicity	Region 9
Escondido Creek	

LOE ID:	73567
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 904S00537.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42803, Toxicity
Escondido Creek

Region 9

LOE ID:	7486
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum: None of the 15 samples were found to exhibit toxicity. Hyalella azteca: None of the 15 samples were found to exhibit toxicity. Ceriodaphnia dubia- Two of fifteen samples were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. The samples were collected from November 2001 through March 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001

Spatial Representation:	Samples were collected at the mass loading station in Escondido Creek east of Rancho Santa Fe rd and under the Camino del Norte bridge.
Temporal Representation:	The samples were collected from November 2001 through March 2006.
Environmental Conditions:	
QAPP Information:	Quality control for project was conducted under Weston's quality control plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 42803, Toxicity Escondido Creek

Region 9

LOE ID:	73568
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 904ESCOxx.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42803, Toxicity Escondido Creek

Region 9

LOE ID:	25804
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>A total of eight samples were analyzed for toxicity. Four samples each were collected at Escondido Creek 5 and Escondido Creek 8.</p> <p>Selenastrum capricornutum- None of the eight samples exhibited toxicity by the Selenastrum capricornutum growth test.</p> <p>Ceriodaphnia dubia- One out of the eight samples collected exhibited toxicity to the Ceriodaphnia dubia survival/reproductive test.</p> <p>Samples were collected as part of California's Surface Water Ambient Monitoring Program. The samples were collected in March, April, June and May of 2002.</p>
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.</p> <p>Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the monitoring station Escondido Creek 5 (904CBESC5 latitude; 33.0865, longitude -117.14507) and 904CBESC8, latitude: 33.03492, longitude -117.23632 located on the main stem of Escondido Creek.
Temporal Representation:	The samples were collected in March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42803, Toxicity

Region 9

Escondido Creek

LOE ID:	26480
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	A total of eight samples were analyzed for toxicity. Four samples each were collected at Escondido Creek 5 and Escondido Creek 8. Hyalella azteca- Three of the eight samples exhibited sediment toxicity. Samples were collected in March, April, June and May of 2002 as part of California's Surface Water Ambient Monitoring Program.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the monitoring station Escondido Creek 5 (904CBESC5 latitude: 33.0865, longitude -117.14507) and 904CBESC8, latitude: 33.03492, longitude -117.23632 located on the main stem of Escondido Creek.
Temporal Representation:	The samples were collected in March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42803, Toxicity
Escondido Creek

Region 9

LOE ID:	73566
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of Hyalella azteca, growth of Selenastrum capricornutum and survival and reproduction of Ceriodaphnia dubia.

Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 904EC-MLS and 904EC-TWAS-1 Escondido Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47719	Region 9
Escondido Creek		

Pollutant:	Alkalinity as CaCO₃
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a Single line of evidence is necessary to assess listing status.

Zero lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Water Quality Criteria for Alkalinity, Carbonate as CaCO₃.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Alkalinity, Carbonate as CaCO₃ and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47719, Alkalinity as CaCO₃	Region 9
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Escondido Creek

LOE ID:	73607
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47719, Alkalinity as CaCO3

Region 9

Escondido Creek

LOE ID:	73606
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47721	Region 9
Escondido Creek		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Water Quality Criteria for Aluminum.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Water Quality Criteria for Aluminum and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47721, Aluminum	Region 9
Escondido Creek	

LOE ID:	73614
Pollutant:	Aluminum

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47721, Aluminum Escondido Creek

Region 9

LOE ID:	73613
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from

aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.

Guideline Reference: [National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]

Temporal Representation: Data was collected on a single day 5/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47721, Aluminum
Escondido Creek

Region 9

LOE ID: 73612

Pollutant: Aluminum

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Aluminum.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).

Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]

Temporal Representation: Data was collected on a single day 5/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 43690
Escondido Creek

Region 9

Pollutant: Antimony

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 28 samples exceeded the OBJECTIVE for Antimony and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.</p>

Line of Evidence (LOE) for Decision ID 43690, Antimony

Region 9

Escondido Creek

LOE ID:	3222
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43690, Antimony

Region 9

Escondido Creek

LOE ID: 78021

Pollutant: Antimony
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Antimony.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for antimony is .006 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	33881	Region 9
Escondido Creek		
Pollutant:	Arsenic	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>6 lines of evidence are available in the administrative record to assess this pollutant. One of the 29 samples exceed the Basin Plan Objective for Arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 29 samples exceeded the Basin Plan Objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 33881, Arsenic
Escondido Creek**

Region 9

LOE ID:	73638
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 33881, Arsenic
Escondido Creek**

Region 9

LOE ID:	73637
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33881, Arsenic

Region 9

Escondido Creek

LOE ID:	73636
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

Line of Evidence (LOE) for Decision ID 33881, Arsenic
Escondido Creek

Region 9

LOE ID: 78023

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 27
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Arsenic.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 33881, Arsenic
Escondido Creek

Region 9

LOE ID: 78022

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33881, Arsenic

Region 9

Escondido Creek

LOE ID:	73639
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [

Temporal Representation:	Escondido Creek above El Camino Del Norte - 904S00537]
Environmental Conditions:	Data was collected on a single day 5/4/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed. Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33881, Arsenic

Region 9

Escondido Creek

LOE ID:	73625
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33881, Arsenic

Region 9

Escondido Creek

LOE ID:	73626
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33881, Arsenic

Region 9

Escondido Creek

LOE ID:	3223
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	One sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33942

Region 9

Escondido Creek

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 38 samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 38 samples exceeded the California Toxics Rule Objective for Cadmium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33942, Cadmium

Region 9

Escondido Creek

LOE ID: 73529

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Cadmium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula

Objective/Criterion Reference:	for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33942, Cadmium

Region 9

Escondido Creek

LOE ID:	73538
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation:	Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33942, Cadmium

Region 9

Escondido Creek

LOE ID:	73521
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 33942, Cadmium

Region 9

Escondido Creek

LOE ID:	73520
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33942, Cadmium

Region 9

Escondido Creek

LOE ID:	3225
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	One sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33942, Cadmium

Region 9

Escondido Creek

LOE ID:	73536
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33942, Cadmium

Region 9

Escondido Creek

LOE ID:	78019
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 33942, Cadmium
Escondido Creek

Region 9

LOE ID: 73535

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]

Temporal Representation: Data was collected on a single day 5/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33942, Cadmium
Escondido Creek

Region 9

LOE ID: 73539

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation:	Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47726	Region 9
Escondido Creek		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47726, Chlordane
Escondido Creek

Region 9

LOE ID: 72830

Pollutant: Chlordane
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: 0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data were collected at the following station 904ESCOxx (Escondido Creek at Camino del Norte).
Temporal Representation: The samples were collected on 5/21/2008.
Environmental Conditions:
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47726, Chlordane
Escondido Creek

Region 9

LOE ID: 73567

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 904S00537.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47726, Chlordane
Escondido Creek

Region 9

LOE ID:	7486
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum: None of the 15 samples were found to exhibit toxicity. Hyalella azteca: None of the 15 samples were found to exhibit toxicity. Ceriodaphnia dubia- Two of fifteen samples were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. The samples were collected from November 2001 through March 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station in Escondido Creek east of Rancho Santa Fe rd and under the Camino del Norte bridge.
Temporal Representation:	The samples were collected from November 2001 through March 2006.
Environmental Conditions:	
QAPP Information:	Quality control for project was conducted under Weston's quality control plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 47726, Chlordane

Region 9

Escondido Creek

LOE ID:	73566
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 904EC-MLS and 904EC-TWAS-1 Escondido Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47726, Chlordane

Region 9

Escondido Creek

LOE ID:	25804
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	A total of eight samples were analyzed for toxicity. Four samples each were collected at Escondido Creek 5 and Escondido Creek 8.
	Selenastrum capricornutum- None of the eight samples exhibited toxicity by the Selenastrum capricornutum growth test.
	Ceriodaphnia dubia- One out of the eight samples collected exhibited toxicity to the Ceriodaphnia dubia survival/reproductive test.
	Samples were collected as part of California's Surface Water Ambient Monitoring Program. The samples were collected in March, April, June and May of 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the monitoring station Escondido Creek 5 (904CBESC5 latitude: 33.0865, longitude -117.14507) and 904CBESC8, latitude: 33.03492, longitude -117.23632 located on the main stem of Escondido Creek.
Temporal Representation:	The samples were collected in March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	47727	Region 9
Escondido Creek		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a Single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Basin Plan Objective for Chloride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Basin Plan Objective for Chloride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47727, Chloride
Escondido Creek**

Region 9

LOE ID: 73530

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 250 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47727, Chloride

Region 9

Escondido Creek

LOE ID:	73532
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47727, Chloride

Region 9

Escondido Creek

LOE ID:	73533
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 250 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]

Temporal Representation: Data was collected on a single day 5/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47729	Region 9
Escondido Creek		

Pollutant: Chlorpyrifos

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 20 samples exceeded the Basin Plan Objective for Chlorpyrifos and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47729, Chlorpyrifos	Region 9
Escondido Creek	

LOE ID: 77734

Pollutant: Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.0 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories 2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47729, Chlorpyrifos
Escondido Creek

Region 9

LOE ID:	77733
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/20/2006-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47729, Chlorpyrifos Escondido Creek

Region 9

LOE ID:	77732
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup

QAPP Information Reference(s):

Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed. [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47729, Chlorpyrifos
Escondido Creek

Region 9

LOE ID:	73534
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47729, Chlorpyrifos
Escondido Creek

Region 9

LOE ID:	73545
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/20/2006-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	42884	Region 9
Escondido Creek		

Pollutant:	Chromium (total)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the Objective for Chromium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 26 exceeded the Basin Plan Objective for Chromium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 42884, Chromium (total)
Escondido Creek**

Region 9

LOE ID:	73558
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 42884, Chromium (total)
Escondido Creek**

Region 9

LOE ID:	73557
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42884, Chromium (total)

Region 9

Escondido Creek

LOE ID:	73556
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42884, Chromium (total)	Region 9
Escondido Creek	

LOE ID:	73570
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 42884, Chromium (total)	Region 9
Escondido Creek	

LOE ID:	73560
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42884, Chromium (total)

Region 9

Escondido Creek

LOE ID:	3226
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation: One sample was collected in 06/03/1998.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42884, Chromium (total)

Region 9

Escondido Creek

LOE ID: 73546

Pollutant: Chromium
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation: Data was collected on a single day 5/4/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 42884, Chromium (total)

Region 9

Escondido Creek

LOE ID: 73559

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33960	Region 9
Escondido Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and Section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under Section 3.6 two lines of evidence are necessary to assess listing status.</p> <p>Eleven lines of evidence are available in the administrative record to assess this pollutant. Two of the 40 samples exceed the Water Quality Objective for Copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 40 samples exceeded the Water Quality Objective for Copper and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Zero of two samples exceeded the Sediment Evaluation Guideline for copper and this sample size is insufficient to determine with the power and confidence of the Listing Policy the applicable beneficial use support rating. A minimum of 16 sediment chemistry samples and 16 sediment toxicity samples to determine if a beneficial use is fully supported using table 3.1. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33960, Copper
Escondido Creek

Region 9

LOE ID:	3227
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33960, Copper
Escondido Creek

Region 9

LOE ID:	73572
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33960, Copper
Escondido Creek

Region 9

LOE ID:	73573
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 33960, Copper
Escondido Creek

Region 9

LOE ID:	73574
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33960, Copper
Escondido Creek

Region 9

LOE ID:	73575
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation: Data was collected on a single day 5/4/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33960, Copper

Region 9

Escondido Creek

LOE ID: 73571

Pollutant: Copper
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation: Data was collected on a single day 5/4/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33960, Copper

Region 9

Escondido Creek

LOE ID: 73547

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Escondido Creek to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33960, Copper

Region 9

Escondido Creek

LOE ID:	73548
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation: Data was collected on a single day 5/4/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33960, Copper

Region 9

Escondido Creek

LOE ID: 73549
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 14
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Copper.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)
Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation: Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 33960, Copper

Region 9

Escondido Creek

LOE ID: 73550
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation:	Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33960, Copper

Region 9

Escondido Creek

LOE ID:	77735
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	47730	Region 9
Escondido Creek		

Pollutant: Cyfluthrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Cyfluthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Cyfluthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47730, Cyfluthrin	Region 9
Escondido Creek	

LOE ID: 73562

Pollutant: Cyfluthrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47730, Cyfluthrin

Region 9

Escondido Creek

LOE ID:	77736
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA.

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	47731	Region 9
Escondido Creek		

Pollutant: Cyhalothrin, Lambda

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Cyhalothrin, Lambda.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Cyhalothrin, Lambda and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47731, Cyhalothrin, Lambda	Region 9
Escondido Creek	

LOE ID: 73563

Pollutant: Cyhalothrin, Lambda

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47731, Cyhalothrin, Lambda

Region 9

Escondido Creek

LOE ID:	77737
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA.

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	47732	Region 9
Escondido Creek		

Pollutant: Cypermethrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Cypermethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Cypermethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47732, Cypermethrin	Region 9
Escondido Creek	

LOE ID: 77738

Pollutant: Cypermethrin

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47732, Cypermethrin Escondido Creek

Region 9

LOE ID:	73577
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

Guideline Reference:	average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012) Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47732, Cypermethrin
Escondido Creek

Region 9

LOE ID:	73578
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47733

Region 9

Escondido Creek

Pollutant: Deltamethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Deltamethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Deltamethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47733, Deltamethrin

Region 9

Escondido Creek

LOE ID: 73582

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47733, Deltamethrin
Escondido Creek

Region 9

LOE ID:	77739
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47733, Deltamethrin
Escondido Creek

Region 9

LOE ID:	73583
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Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47734	Region 9
Escondido Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #73584, and 0 of 17 samples exceed the Criteria</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #73584, and 0 of 17 samples exceed the Criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47734, Diazinon

Region 9

Escondido Creek

LOE ID:	77740
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47734, Diazinon

Region 9

Escondido Creek

LOE ID:	77741
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte (904CAR03), Escondido Creek @ East County Club Drive (904CAR02)]
Temporal Representation:	Data was collected over the time period 6/20/2006-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47734, Diazinon

Region 9

Escondido Creek

LOE ID:	73585
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/20/2006-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47734, Diazinon

Region 9

Escondido Creek

LOE ID:	73584
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 02/11/2005-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and

QAPP Information Reference(s): [Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed. Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47734, Diazinon

Region 9

Escondido Creek

LOE ID: 73586

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Diazinon.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water lifetime health advisory for diazinon is 1 µg/L.
Guideline Reference: [2011 Edition of the Drinking Water Standards and Health Advisories](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID

47735

Region 9

Escondido Creek

Pollutant: Dieldrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Dieldrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47735, Dieldrin
Escondido Creek

Region 9

LOE ID:	73587
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]

Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47736	Region 9
Escondido Creek		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Endrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47736, Endrin		Region 9
Escondido Creek		

LOE ID:	73588
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47737	Region 9
Escondido Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Esfenvalerate/Fenvalerate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Esfenvalerate/Fenvalerate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

**Line of Evidence (LOE) for Decision ID 47737, Esfenvalerate/Fenvalerate
Escondido Creek**
Region 9

LOE ID:	77742
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 47737, Esfenvalerate/Fenvalerate
Escondido Creek**
Region 9

LOE ID:	73592
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47737, Esfenvalerate/Fenvalerate

Region 9

Escondido Creek

LOE ID:	73590
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]

Temporal Representation:	Data was collected over the time period 11/30/2007-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47738	Region 9
Escondido Creek		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Fenpropathrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Fenpropathrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47738, Fenpropathrin		Region 9
Escondido Creek		

LOE ID:	73595
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47738, Fenpropathrin

Region 9

Escondido Creek

LOE ID:	77743
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
SWAMP data collected before September 2008 followed the QAMP 2002.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	47739	Region 9
Escondido Creek		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Basin Plan Objective for Iron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Basin Plan Objective for Iron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47739, Iron	Region 9
Escondido Creek	

LOE ID:	73597
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use

Data Reference:	support and results are as follows: 1 of 1 samples exceed the criterion for Iron. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47739, Iron Escondido Creek

Region 9

LOE ID:	73598
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47740 Escondido Creek

Region 9

Pollutant:
Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Lead
Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 40 samples exceed the California Toxics Rule Objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47740, Lead
Escondido Creek

Region 9

LOE ID: 73603

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation: Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47740, Lead
Escondido Creek

Region 9

LOE ID: 73605
Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 25
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Lead.
Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47740, Lead
Escondido Creek

Region 9

LOE ID:	73604
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation:	Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 47740, Lead
Escondido Creek**

Region 9

LOE ID:	73600
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47740, Lead

Region 9

Escondido Creek

LOE ID:	73602
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47741

Region 9

Escondido Creek

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Lindane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47741, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Escondido Creek

LOE ID:	77744
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

Guideline Reference: for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
[Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	47743	Region 9
Escondido Creek		

Pollutant: Methyl Parathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Methyl Parathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Methyl Parathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47743, Methyl Parathion	Region 9
Escondido Creek	

LOE ID: 77746

Pollutant: Methyl Parathion
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	33968	Region 9
Escondido Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. One of the 29 samples exceed the Basin Plan Objective and zero of one samples exceeded the Evaluation guideline for Nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 29 samples exceeded the Basin Plan Objective and zero of one samples exceeded the Evaluation guideline for Nickel and this does not exceed the allowable frequency listed in Table 3.1 of

the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33968, Nickel

Region 9

Escondido Creek

LOE ID:	3229
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33968, Nickel

Region 9

Escondido Creek

LOE ID:	73621
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33968, Nickel

Region 9

Escondido Creek

LOE ID:	73620
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Escondido Creek

LOE ID:	73619
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33968, Nickel

Escondido Creek

LOE ID:	73629
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33968, Nickel

Region 9

Escondido Creek

LOE ID:	73627
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33968, Nickel

Region 9

Escondido Creek

LOE ID:	73628
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33968, Nickel
Escondido Creek

Region 9

LOE ID:	77747
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California

Objective/Criterion Reference: Code of Regulations).
[Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	48464	Region 9
Escondido Creek		

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 samples exceed the Basin Plan Objective for Nitrate/Nitrite (Nitrite + Nitrate as N).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 31 samples exceeded the Basin Plan Objective for Nitrate/Nitrite (Nitrite + Nitrate as N) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48464, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
Escondido Creek	

LOE ID: 77748

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 48464, Nitrate/Nitrite (Nitrite + Nitrate as N)
Escondido Creek

Region 9

LOE ID:	73630
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48464, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
Escondido Creek	

LOE ID:	73640
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 7/8/2003-9/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48475	Region 9
Escondido Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 samples exceed the Basin Plan Objective for Nitrogen, Nitrite.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 30 samples exceeded the Basin Plan Objective for Nitrogen, Nitrite and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 48475, Nitrogen, Nitrite
Escondido Creek**

Region 9

LOE ID:	77749
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston

Line of Evidence (LOE) for Decision ID 48475, Nitrogen, Nitrite**Region 9****Escondido Creek**

LOE ID:	73641
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48475, Nitrogen, Nitrite**Region 9****Escondido Creek**

LOE ID:	73642
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]

Temporal Representation: Data was collected over the time period 6/10/2003-9/3/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48476	Region 9
Escondido Creek		

Pollutant: Nitrogen, ammonia (Total Ammonia)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Basin Plan Objective for Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Basin Plan Objective for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48476, Nitrogen, ammonia (Total Ammonia)	Region 9
Escondido Creek	

LOE ID: 73616

Pollutant: Nitrogen, ammonia (Total Ammonia)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia â€™ Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48476, Nitrogen, ammonia (Total Ammonia)

Region 9

Escondido Creek

LOE ID:	73624
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego

Objective/Criterion Reference:	Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/10/2003-7/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48476, Nitrogen, ammonia (Total Ammonia)

Region 9

Escondido Creek

LOE ID:	73623
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47744

Region 9

Escondido Creek

Pollutant: PCBs (Polychlorinated biphenyls)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PCBs. One of One samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the One samples exceed the Evaluation Guideline for PCBs and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47744, PCBs (Polychlorinated biphenyls)

Region 9

Escondido Creek

LOE ID: 73568

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 904ESCOxx.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47744, PCBs (Polychlorinated biphenyls)
Escondido Creek

Region 9

LOE ID:	72810
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 904ESCOxx (Escondido Creek at Camino del Norte).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47745
Escondido Creek

Region 9

Pollutant:
Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Permethrin, total
Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence for sediment toxicity is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Permethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Permethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47745, Permethrin, total
Escondido Creek

Region 9

LOE ID: 73654

Pollutant: Permethrin, total
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47745, Permethrin, total Escondido Creek

Region 9

LOE ID:	73656
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 33634 Escondido Creek

Region 9

Pollutant: Silver
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)(2012)

Revised
Pollutant

Regional Board Conclusion:

Three line of evidence is available in the administrative record to assess this pollutant. Zero of two samples exceed the Basin Plan criteria, and the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33634, Silver
Escondido Creek

Region 9

LOE ID: 73523

Pollutant: Silver
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).

Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]

Temporal Representation: Data was collected on a single day 5/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33634, Silver
Escondido Creek

Region 9

LOE ID: 73525

Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33634, Silver
Escondido Creek

Region 9

LOE ID:	73524
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]

Temporal Representation:

Data was collected on a single day 5/4/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33634, Silver

Region 9

Escondido Creek

LOE ID: 3232

Pollutant: Silver

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for silver is 0.1 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.

Temporal Representation:

Samples were collected on 06/03/1998.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID 47746

Region 9

Escondido Creek

Pollutant: Specific Conductivity

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Basin Plan Objective for Specific Conductivity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Basin Plan Objective for Specific Conductivity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47746, Specific Conductivity

Region 9

Escondido Creek

LOE ID:	73540
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lineof evidence is available in the administrative record to assess this pollutant. Zero of 27 samples exceed the secondary MCL for MBAS in water.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 27 samples exceed the secondary MCL for MBAS in water and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47747, Surfactants (MBAS)	Region 9
Escondido Creek	

LOE ID:	78020
Pollutant:	Surfactants (MBAS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for MBAS.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Secondary California Maximum Contaminant Level for MBAS is 0.5 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47748	Region 9
Escondido Creek		
Pollutant:	Temperature, water	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the 28 samples exceed the Evaluation Guideline for Temperature, water.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 28 samples exceed the Evaluation Guideline for Temperature, water and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, additional data and information is available indicating that standards may be met. Two additional lines of evidence are available. <p>First, the location of the sampling and timing may not be representative of steelhead habitat utilization in the waterbody, and samples were taken as grabs. Critical information needed to assess temperatures for steelhead include growth periods (spring and fall) as well as summer daytime maximums in documented oversummering habitat.</p> <p>Second, the criteria of 21 degrees as a limit is not necessarily applicable to southern California steelhead, which have been shown to have higher temperature tolerance. See Spina Environ Biol Fish (2007) 80:23Å–34.</p>	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 47748, Temperature, water		Region 9

Escondido Creek

LOE ID:	73544
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47748, Temperature, water Escondido Creek

Region 9

LOE ID:	73551
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Seven of the 27 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Evaluation Guideline: Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA. Davis
Spatial Representation:	Samples were collected at the following stations: EDC-010-Santa Fe Rd. Overpass EDC-020-El Camino del Norte Bridge EDC-030-Elfin Forest Rd/ Harmony Grove Rd EDC-040-Elfin Forest Reserve EDC-050-Country Club Dr/ Harmony Grove Rd
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	Quality Assurance Project Plan for San Diego Regional Water Quality Assessment and Outreach Project.

DECISION ID	33880	Region 9
Escondido Creek		
Pollutant:	Turbidity	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. One of the five samples exceed the Basin Plan Objective for turbidity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of five samples exceeded the basin plan objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 33880, Turbidity
Escondido Creek

Region 9

LOE ID:	3219
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected in 1998 by RWQCB9. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek below the Harmony Grove Bridge.
Temporal Representation:	One sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33880, Turbidity
Escondido Creek

Region 9

LOE ID:	3221
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by DWR in 1998 and 2000. One of 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.

Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek near Harmony Grove.
Temporal Representation:	Samples were collected once each in May and November, 1998 and in November 2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33880, Turbidity	Region 9
Escondido Creek	

LOE ID:	73698
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33880, Turbidity	Region 9
Escondido Creek	

LOE ID:	3220
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32838	Region 9
Escondido Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. One of the 43 samples exceed the Basin Plan Objective and zero out of two samples exceeded the Evaluation Guideline for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 43 samples exceeded the Basin Plan Objective and zero of two samples exceeded the Evaluation Guideline for zinc, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 32838, Zinc
Escondido Creek

Region 9

LOE ID:	73708
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 32838, Zinc
Escondido Creek

Region 9

LOE ID:	73707
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation:	Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 32838, Zinc

Region 9

Escondido Creek

LOE ID:	73706
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 32838, Zinc

Region 9

Escondido Creek

LOE ID: 73705

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation: Data was collected on a single day 5/4/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 32838, Zinc

Region 9

Escondido Creek

LOE ID: 73703

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the

Data Reference:	<p>criterion for Zinc.</p> Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ East County Club Drive, Escondido Creek @ El Camino Del Norte]
Temporal Representation:	Data was collected over the time period 6/10/2003-7/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 32838, Zinc	Region 9
Escondido Creek	

LOE ID:	73702
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32838, Zinc	Region 9
Escondido Creek	

LOE ID:	73701
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32838, Zinc

Region 9

Escondido Creek

LOE ID:	73700
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32838, Zinc
Escondido Creek

Region 9

LOE ID:	73699
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32838, Zinc
Escondido Creek

Region 9

LOE ID:	3234
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin plan: For inland surface waters with a municipal beneficial use, the WQO for zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32838, Zinc

Region 9

Escondido Creek

LOE ID:	77755
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [

Temporal Representation:
Environmental Conditions:
QAPP Information:

Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Data was collected over the time period 11/29/2001-11/4/2008.
Staff is not aware of any special conditions that might affect interpretation of the data.
The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

QAPP Information Reference(s):

DECISION ID	34042	Region 9
Escondido Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line) of evidence are necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of the ten samples exceed the Basin Plan Objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of ten samples exceeded the Basin Plan Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 34042, pH	Region 9
Escondido Creek	

LOE ID:	73657
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 34042, pH Escondido Creek

Region 9

LOE ID:	73658
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 34042, pH Escondido Creek

Region 9

LOE ID:	3240
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Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by DWR from 1998 to 2000. Three of 5 field samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5(minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the field at Escondido Creek near Harmony Grove.
Temporal Representation:	Samples were collected once each in May and November each year from 05/1998 to 05/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34042, pH Escondido Creek

Region 9

LOE ID:	3241
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by DWR from 1998 to 2000. None of 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5(minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples from Escondido Creek near Harmony Grove were analyzed in the lab.
Temporal Representation:	Samples were collected once each in May and November each year from 11/1998 to

05/2000.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

DECISION ID	46213	Region 9
Escondido Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects	Region 9
Escondido Creek	

LOE ID:	73650
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	Benthic macroinvertebrate surveys

Data Used to Assess Water Quality:	Thirty-eight of the thirty-eight samples collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at six different stations on Escondido Creek. Station ESC-CC is the same as station ESC-TWAS-1.
Temporal Representation:	The samples were collected in May and October 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	73649
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 10 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams.

Spatial Representation: Samples were collected at the following station: 904CBESC8 (Escondido Creek 8).
Temporal Representation: Survey done May 9, 2008.
Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 73609

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 24
Number of Exceedances: 3

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Malathion.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.

Guideline Reference: [National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology](#)

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/8/2002-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 72755

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score for this site was 14.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected from Escondido Creek above El Camino Del Norte.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects
Escondido Creek

Region 9

LOE ID:	73584
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 02/11/2005-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	73518
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/4/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects
Escondido Creek

Region 9

LOE ID:	79543
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	18
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	A total of 39 samples were taken at 8 stations in Escondido Creek. Eighteen of the thirty-nine CSCI scores for this site are below the 0.79 threshold, and therefore the site is exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 904CBESC8 904ESC-RSFR 904ESC-MLS 904S00537 904ESC-VC 904ESC-EF 904ESC-TWAS-1 904ESC-HRB
Temporal Representation:	Samples were taken from 2001 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and

QAPP Information Reference(s):

2008 water quality monitoring project, the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the SWAMP RWB9 Stormwater Monitoring Council CY 2009.

[RWB9 Stormwater Monitoring Council CY 2009](#)

[RWB9 Status Sampling 2007 and 2008](#)

[Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 3235

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: Data were collected in 1998 and 1999 for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores for locatoin EC-HRBranged from 75-98, a relatively low score compared to other sampled waterbodies. BMI scores at this location ranged from average to below average, compared to other sampled waterbodies. (SDRWQCB, 1999-A).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected in Escondido Creek 5 riffles downstream of Harmony Grove Bridge (EC-HRB).

Temporal Representation: Samples were collected in May, September and November 1998 and in May 1999.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 3237

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. The physical habitat score for EC-RSFR) was 86 in 05/1998, lower compared to other waterbodies. The BMI score was slightly below average at this location, compared to other waterbodies. (SDRWQCB, 1999-A).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at 5 riffles upstream of Rancho Santa Fe Road (EC-RSFR).
Temporal Representation:	Samples were collected in 05/1998.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	3238
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two sets of samples were collected by the Stream Team at Escondido Creek in 2001. For both sets, Taxa Richness was 4.7. For set 1, EPT index was 87.3, and was 88.2 for the second set. Tolerance valuse for sets 1 and 2 were 4.3 and 4.4, respectively. 98.4-100% of feeding groups were either collectors of filterers. (SDRWQCB, 1999-A).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek. Two sets of samples were reported. It is unclear whether both sets were taken at the same location.
Temporal Representation:	Samples were collected in Spring of 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	3236
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected in 1998 and 1999 for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat quality scores for location EC-EF ranged from 112-150, moderate-higher scores compared to other sampled waterbodies. BMI scores showed locatin EC-EF to be near average compared to other waterbodies sampled. (SDRWQCB, 1999-A).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek, 5 riffles downstream of Elfin Forest Resort (EC-EF).
Temporal Representation:	Samples were collected in May, September, and November 1998 and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects
Escondido Creek

Region 9

LOE ID:	3247
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight total samples taken at two stations, a total of five samples from two sampling stations exceeded the CTR criteria (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses. California Toxic Rule: Human Health-FW (water & organisms) .00059 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Two Escondido Creek stations located at 33.03393 -117.23565 and at 33.08559 -117.15037.

Temporal Representation: Eight samples collected from March through September of 2002.

Environmental Conditions: Escondido Creek Watershed; Escondido Creek 904.61.

QAPP Information: SWAMP Quality Assurance Plan.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 3245

Pollutant: Phosphate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8

Number of Exceedances: 6

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Eight water samples, six samples exceeding (SWAMP, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin; 0.1 mg/l in stream and flowing waters.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Two stations at Escondido Creek ESC5, HBA 904.62 (33.08559 -117.15037) and at ESC8, HBA 904.61 (33.03393 -117.23565).

Temporal Representation: Eight samples collected from March through September of 2002.

Environmental Conditions: Escondido Creek Watershed; Escondido Creek 904.61 and 904.62.

QAPP Information: SWAMP Quality Assurance Plan.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 6258

Pollutant: Phosphorus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 326

Number of Exceedances: 117

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One hundred seventeen samples out of 326 exceed the water quality objective. Samples were collected by the City of Escondido for monitoring of Escondido Creek. Samples were collected quarterly in 1998 through 2005.
Data Reference:	City of Escondido. 2007. Baseline quarterly monitoring report for Calendar Years 1998-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. From the Basin Plan, "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board" (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at 15 monitoring stations within Escondido Creek. Sample stations locations were Station 907, 908, 909, 910, 911, 912, 913, 916, 917, 920, 922, 923, 924, and 925. Stations 912 and 916 were grouped as one station due to close proximity.
Temporal Representation:	Samples were collected quarterly in 1999 through 2006.
Environmental Conditions:	Samples were collected during dry and wet weather.
QAPP Information:	Quality assurance conducted according to the City of Escondido's quality assurance manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	7486
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum: None of the 15 samples were found to exhibit toxicity. Hyalella azteca: None of the 15 samples were found to exhibit toxicity. Ceriodaphnia dubia- Two of fifteen samples were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. The samples were collected from November 2001 through March 2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station in Escondido Creek east of Rancho Santa Fe rd and under the Camino del Norte bridge.
Temporal Representation:	The samples were collected from November 2001 through March 2006.
Environmental Conditions:	
QAPP Information:	Quality control for project was conducted under Weston's quality control plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects
Escondido Creek

Region 9

LOE ID:	7368
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All eight samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on March 13 and 14, April 24, June 4 and September 17 and 18, 2002.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at monitoring station, Escondido Creek 5 (station id:904CBESC5, latitude 33.08651, longitude -117.14507) and Escondido Creek 8 (904CBESC8, latitude 33.03492, longitude -117.23632) located on the main stem of Escondido Creek.
Temporal Representation:	Samples were collected on March 13 and 14, April 24, June 4 and September 17 and 18, 2002.
Environmental Conditions:	The first two samples were taken during minimum and declining base flow respectively. The

last two samples were taken during wet weather, between storm events and high base flow respectively.

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 7366

Pollutant: Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 15
Number of Exceedances: 15

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to three times a year from 2001 - 2006.

Data Reference: [Urban Runoff Monitoring. Volume 1- Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the Camino Del Norte Bridge east of Rancho Santa Fe Road along a natural channel in Encinitas.

Temporal Representation: Samples were collected one to three times a year from 2001 - 2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: Quality control of sample collection conducted under Weston Solution's Quality Management Manual 2004.

QAPP Information Reference(s): [Weston Solutions. 2004. Quality Management Manual. March 2004 \(Revised December 2009\).](#)

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID: 8887

Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Water samples were collected at Escondido Creek station 5 904CBESC5 and Escondido Creek station 8 904CBESC8 in March, April, June and September 2002, all three showed excessive phosphorus concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek station 904CBESC5; (Latitude 33.0863, Longitude -117.1450) and Escondido Creek station 8 904CBESC8; (Latitude 33.03492, Longitude -117.2363)
Temporal Representation:	Samples were collected on March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	26718
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	35
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Thirty five samples of IBI data were taken from May 2001 to May 2007 at five sampling sites. All 35 of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be

Objective/Criterion Reference:	determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at five sites: ESC-CC, ESC-EF, ESC-HRB, ESC-RSFR, and ESC-VC on Escondido Creek.
Temporal Representation:	Sampling occurred during May and October for a period of seven years from May 2001 to May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	26480
Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	A total of eight samples were analyzed for toxicity. Four samples each were collected at Escondido Creek 5 and Escondido Creek 8. Hyalella azteca- Three of the eight samples exhibited sediment toxicity. Samples were collected in March, April, June and May of 2002 as part of California's Surface Water Ambient Monitoring Program.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than

Guideline Reference:	100% of the test sample concentration. Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the monitoring station Escondido Creek 5 (904CBESC5 latitude; 33.0865, longitude -117.14507) and 904CBESC8, latitude: 33.03492, longitude -117.23632 located on the main stem of Escondido Creek.
Temporal Representation:	The samples were collected in March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects

Region 9

Escondido Creek

LOE ID:	26384
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seventeen samples of IBI data were taken from May 1998 to 2007 at four sampling sites. All 17 samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at four sites: 904ECEfxx, 904EChRBx, 904ECRSFR, and 904ECHGxx on Escondido Creek.
Temporal Representation:	Sampling occurred during one to three events from May 1998 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the

QAPP Information Reference(s):

[State of California, California Monitoring and Assessment Program: "CMAP".](#)
[Quality Assurance Project Plan for the California Stream Bioassessment Procedure](#)
[The San Diego Stream Team Quality Assurance Project Plan](#)

Line of Evidence (LOE) for Decision ID 46213, Benthic Community Effects
Escondido Creek

Region 9

LOE ID:	73566
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 904EC-MLS and 904EC-TWAS-1 Escondido Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID 47722

Region 9

Escondido Creek

Pollutant:	Bifenthrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Four of the Five samples exceed the Water Quality Criteria for Bifenthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of Five samples exceed the Water Quality Criteria for Bifenthrin and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47722, Bifenthrin**Region 9****Escondido Creek**

LOE ID:	73518
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47722, Bifenthrin
Escondido Creek

Region 9

LOE ID:	73653
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47722, Bifenthrin
Escondido Creek

Region 9

LOE ID:	73566
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 904EC-MLS and 904EC-TWAS-1 Escondido Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47722, Bifenthrin

Region 9

Escondido Creek

LOE ID:	73651
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA.

Spatial Representation: Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	47742	Region 9
Escondido Creek		

Pollutant: Malathion

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2027

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 31 samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 31 samples exceed the Water Quality Criteria for Malathion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47742, Malathion	Region 9
Escondido Creek	

LOE ID: 73610

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/20/2006-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47742, Malathion Escondido Creek

Region 9

LOE ID:	73608
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The USEPA drinking water lifetime health advisory for malathion is 500 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47742, Malathion

Region 9

Escondido Creek

LOE ID:	73609
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek - 904ESC-MLS, Escondido Creek - 904ESC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Escondido Creek

LOE ID:	77745
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) archived advisory level criteria for malathion in drinking water is 160.0 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 2 monitoring sites [Escondido Creek @ El Camino Del Norte, Escondido Creek @ East County Club Drive]
Temporal Representation:	Data was collected over the time period 6/20/2006-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

33920

Region 9

Escondido Creek

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Five out of the</p>

8 samples exceed the California Toxic Rule: Human Health-FW (water & organisms) criterion of 0.00059 mg/L.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 8 samples exceeded the CTR criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33920, DDT (Dichlorodiphenyltrichloroethane)
Escondido Creek**

Region 9

LOE ID:	6231
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Data reviewed was from the City of Escondido's Live Stream Discharge monitoring of Escondido Creek. Quarterly sample occurred between 2004 and 2005.
Data Reference:	Six samples were collected and analyzed for pesticides however the detection limits were less than 5.0 ug/liter. Well above the CTR criteria. City of Escondido. 2007. Baseline quarterly monitoring report for Calendar Years 1998-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the DDT criterion for protection of human health is 0.00059 ug/L (USEPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3 monitoring stations within Escondido Creek. Sample stations locations were Station 912, 916, and 917. Stations 912 and 916 were grouped as one station due to close proximity.
Temporal Representation:	Samples were collected quarterly in 2004 and 2005
Environmental Conditions:	Samples were collected during dry weather.
QAPP Information:	Quality control for the toxicity portion of this study was conducted in accordance with the City of Escondido's NPDES monitoring program.

Line of Evidence (LOE) for Decision ID 33920, DDT (Dichlorodiphenyltrichloroethane)**Region 9****Escondido Creek**

LOE ID:	73579
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33920, DDT (Dichlorodiphenyltrichloroethane)**Region 9****Escondido Creek**

LOE ID:	73580
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33920, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Escondido Creek

LOE ID:	73553
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek at Camino del Norte - 904ESCOxx]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Line of Evidence (LOE) for Decision ID 33920, DDT (Dichlorodiphenyltrichloroethane)
Escondido Creek

Region 9

LOE ID: 3247

Pollutant: DDT (Dichlorodiphenyltrichloroethane)
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
 Number of Exceedances: 5

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Eight total samples taken at two stations, a total of five samples from two sampling stations exceeded the CTR criteria (SWAMP, 2004).
 Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: San Diego RWQCB Basin Plan: No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses.
 California Toxic Rule: Human Health-FW (water & organisms) .00059 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Two Escondido Creek stations located at 33.03393 -117.23565 and at 33.08559 -117.15037.

Temporal Representation: Eight samples collected from March through September of 2002.

Environmental Conditions: Escondido Creek Watershed; Escondido Creek 904.61.

QAPP Information: SWAMP Quality Assurance Plan.

QAPP Information Reference(s):

DECISION ID 33919
Escondido Creek

Region 9

Pollutant: Manganese
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess pollutant. Twelve of 28 samples exceed the water quality objective for manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 28 samples exceeded the secondary MCL for manganese and this exceeds the allowable frequency listed in Table Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 33919, Manganese
Escondido Creek**

Region 9

LOE ID:	73617
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 33919, Manganese
Escondido Creek**

Region 9

LOE ID:	6240
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two out of eight samples exceeded the water quality objective. Samples were collected by the City of Escondido for monitoring of Escondido Creek. Samples were collected quarterly in 2003 through 2005.
Data Reference:	City of Escondido. 2007. Baseline quarterly monitoring report for Calendar Years 1998-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the manganese water quality objective for Escondido Creek is 0.05 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 6 monitoring stations within Escondido Creek. Sample stations locations were Station 910, 912, 916, 917, 920, and 923. Stations 912 and 916 were grouped as one station due to close proximity.
Temporal Representation:	Samples were collected quarterly in 2003 through 2005.
Environmental Conditions:	Samples were collected during dry weather.
QAPP Information:	Samples were collected and analyzed in compliance with the City of Escondido's Quality Assurance Program 2009.
QAPP Information Reference(s):	City of Escondido. 2009. Quality Assurance Program. City of Escondido Water Quality Lab. January 2009

Line of Evidence (LOE) for Decision ID 33919, Manganese Escondido Creek

Region 9

LOE ID:	3246
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve water samples, six samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Escondido Creek is 0.05 milligrams/liter (mg/L) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Two stations at Escondido Creek ESC5, HBA 904.62 (33.08559 -117.15037) and ESC8, HBA 904.61(33.03393 -117.23565).
Temporal Representation:	Twelve samples collected from March through September of 2002.
Environmental Conditions:	Escondido Creek Watershed; Escondido Creek 904.61 and 904.62
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33919, Manganese Escondido Creek

Region 9

LOE ID:	8884
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Seven water samples were collected at Escondido Creek 5 Station 904CBESC5 and Escondido Creek 8 Station 904CBESC8 on March, April, June and September 2002. Three of the seven samples exceed the secondard drinking water standard for manganese according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The secondary drinking water standard for manganese is 0.05 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Escondido Creek 5 Station 904CBESC8; (Latitude 33.0861, Longitude -117.1449) and Escondido Creek 8 Station 904CBESC8; (Latitude 33.0348, Longitude -117.2363).
Temporal Representation:	Samples were collected in March, April, June and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 33919, Manganese Escondido Creek

Region 9

LOE ID:	73611
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33133	Region 9
Escondido Creek		

Pollutant:	Phosphate
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One hundred and twenty-nine of the 342 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred and twenty-nine of the 342 samples exceeded the basin plan water quality goal and this exceeds the allowable frequency according to Table 4.1
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.
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Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33133, Phosphate
Escondido Creek**

Region 9

LOE ID: 8887

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 6

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Water samples were collected at Escondido Creek station 5 904CBESC5 and Escondido Creek station 8 904CBESC8 in March, April, June and September 2002, all three showed excessive phosphorus concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on March, April, June and September 2002.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Escondido Creek station 904CBESC5; (Latitude 33.0863, Longitude -117.1450) and Escondido Creek station 8 904CBESC8; (Latitude 33.03492, Longitude -117.2363)

Temporal Representation: Samples were collected on March, April, June and September 2002.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

**Line of Evidence (LOE) for Decision ID 33133, Phosphate
Escondido Creek**

Region 9

LOE ID: 3245

Pollutant: Phosphate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 6

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight water samples, six samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin; 0.1 mg/l in stream and flowing waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Two stations at Escondido Creek ESC5, HBA 904.62 (33.08559 -117.15037) and at ESC8, HBA 904.61 (33.03393 -117.23565).
Temporal Representation:	Eight samples collected from March through September of 2002.
Environmental Conditions:	Escondido Creek Watershed; Escondido Creek 904.61 and 904.62.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33133, Phosphate

Region 9

Escondido Creek

LOE ID:	6258
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	326
Number of Exceedances:	117
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One hundred seventeen samples out of 326 exceed the water quality objective. Samples were collected by the City of Escondido for monitoring of Escondido Creek. Samples were collected quarterly in 1998 through 2005.
Data Reference:	City of Escondido. 2007. Baseline quarterly monitoring report for Calendar Years 1998-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. From the Basin Plan, "A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board" (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at 15 monitoring stations within Escondido Creek. Sample stations locations were Station 907, 908, 909, 910, 911, 912, 913, 916, 917, 920, 922, 923, 924, and 925. Stations 912 and 916 were grouped as one station due to close proximity.
Temporal Representation:	Samples were collected quarterly in 1999 through 2006.
Environmental Conditions:	Samples were collected during dry and wet weather.
QAPP Information:	Quality assurance conducted according to the City of Escondido's quality assurance manual.

DECISION ID	33685	Region 9
Escondido Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The 348 of 354 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33685, Total Dissolved Solids	Region 9
Escondido Creek	

LOE ID:	73554
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33685, Total Dissolved Solids

Region 9

Escondido Creek

LOE ID:	73555
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33685, Total Dissolved Solids

Region 9

Escondido Creek

LOE ID:	73565
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Escondido Creek within the Carlsbad Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33685, Total Dissolved Solids

Region 9

Escondido Creek

LOE ID:	6250
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	354
Number of Exceedances:	348
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three hundred fifty four sample out of 348 exceed the water quality objective. Samples were collected by the City of Escondido for monitoring of Escondido Creek. Samples were collected 1998 through 2005.
Data Reference:	City of Escondido. 2007. Baseline quarterly monitoring report for Calendar Years 1998-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the total dissolved solids water quality objective for Escondido Creek is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 14 monitoring stations within Escondido Creek. Sample stations locations were Station 907, 908, 909, 910, 911, 912, 913, 916, 917, 920, 922, 923, 924, and 925. Stations 912 and 916 were grouped as one station due to close proximity.
Temporal Representation:	Samples were collected quarterly in 1998 through 2005.
Environmental Conditions:	Samples were collected during dry and wet weather.

QAPP Information: Quality control for the water chemistry was conducted in accordance with the City of Escondido's NPDES monitoring program.

QAPP Information Reference(s): [City of Escondido. 2009. Quality Assurance Program. City of Escondido Water Quality Lab. January 2009](#)

Line of Evidence (LOE) for Decision ID 33685, Total Dissolved Solids
Escondido Creek

Region 9

LOE ID: 3218

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 5
Number of Exceedances: 3

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by DWR from 1998 to 2000. Three of 5 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Escondido Creek near Harmony Grove.
Temporal Representation: Samples were collected once each in May and November each year from 05/1998 to 11/2000.

Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33685, Total Dissolved Solids
Escondido Creek

Region 9

LOE ID: 3217

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33685, Total Dissolved Solids

Region 9

Escondido Creek

LOE ID:	3216
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek below Harmony Grove Bridge.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33879

Region 9

Escondido Creek

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33879, Beryllium
Escondido Creek****Region 9**

LOE ID: 3224

Pollutant: Beryllium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by RWQCB9 in 1998. 1 sample was collected, it was not in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.

Temporal Representation: One sample was collected on 06/03/1998.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

**DECISION ID 44234
Escondido Creek****Region 9**

Pollutant: Boron
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44234, Boron Escondido Creek

Region 9

LOE ID:	3242
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by DWR from 1998-2000. None of the 4 samples were in exceedance. (S.D. Dept. of Water Resources).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin plan: For inland surface waters and all beneficial uses, the WQO for Boron is 0.75 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek near Harmony Grove.
Temporal Representation:	Samples were collected once each in May and November each year from 11/1998 to 05/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID Escondido Creek

34091

Region 9

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34091, Mercury Escondido Creek

Region 9

LOE ID:	3228
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

35906

Region 9

Escondido Creek

Pollutant: Oxygen, Dissolved
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One of the one sample exceed the Basin Plan Objective for Oxygen, Dissolved.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the Basin Plan Objective for Oxygen, Dissolved and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 35906, Oxygen, Dissolved

Region 9

Escondido Creek

LOE ID: 3239

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by DWR from 1998 to 2000. None of the 5 samples were in exceedance. (S.D. Department of Water Resources).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek near Harmony Grove.
Temporal Representation:	Samples were collected once each in May and November during each year from 05/1998 to 05/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 35906, Oxygen, Dissolved
Escondido Creek**

Region 9

LOE ID:	73643
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 35906, Oxygen, Dissolved
Escondido Creek**

Region 9

LOE ID:	73644
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Escondido Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Escondido Creek was collected at 1 monitoring site [Escondido Creek above El Camino Del Norte - 904S00537]
Temporal Representation:	Data was collected on a single day 5/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33620	Region 9
Escondido Creek		

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was collected and it did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33620, Thallium	Region 9
Escondido Creek	

LOE ID: 3233

Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected, it was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Escondido Creek at the intersection of Elfin Forest and Harmony Grove.
Temporal Representation:	Samples were collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43310	Region 9
Escondido Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 24 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-four of the 24 samples exceed the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 43310, Nitrogen
Escondido Creek**

Region 9

LOE ID:	7366
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected one to three times a year from 2001 - 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Camino Del Norte Bridge east of Rancho Santa Fe Road along a natural channel in Encinitas.
Temporal Representation:	Samples were collected one to three times a year from 2001 - 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control of sample collection conducted under Weston Solution's Quality Management Manual 2004.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

**Line of Evidence (LOE) for Decision ID 43310, Nitrogen
Escondido Creek**

Region 9

LOE ID:	7369
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One sample was collected and it exceeds the water quality objective. The report was submitted to the San Diego Regional Water Quality Control Board Report in June 2006 as part of the Surface Ambient Monitoring Program. The sample was collected on June 13, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring station Escondido Creek 5 (station id: 904CBESC5 lat/long: 33.008651/-117.14506), located on the main stem of Escondido Creek.
Temporal Representation:	The sample was collected on June 13, 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 43310, Nitrogen
Escondido Creek

Region 9

LOE ID:	7368
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All eight samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on March 13 and 14, April 24, June 4 and September 17 and 18, 2002.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.</p> <p>A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at monitoring station, Escondido Creek 5 (station id:904CBESC5, latitude 33.08651, longitude -117.14507) and Escondido Creek 8 (904CBESC8, latitude 33.03492, longitude -117.23632) located on the main stem of Escondido Creek.
Temporal Representation:	Samples were collected on March 13 and 14, April 24, June 4 and September 17 and 18, 2002.
Environmental Conditions:	The first two samples were taken during minimum and declining base flow respectively. The last two samples were taken during wet weather, between storm events and high base flow respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Kit Carson Creek](#)
Water Body ID: CAR9052100020010926132824
Water Body Type: River & Stream

DECISION ID	43934	Region 9
Kit Carson Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence does not provide sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, it is unknown if the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. Carry-over bioassessment data did not have California Stream Condition Index scores calculated.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43934, Benthic Community Effects	Region 9
Kit Carson Creek	

LOE ID: 3255
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Not Specified
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected by the Stream Team in 2000 and 2001. Taxa Richness increased from Fall to Spring from 3.7 to 7.0. EPT index increased from 1.1 to 11.2. Tolerance value decreased from 6.7 to 5.8. For both seasons, the dominant feeding group was collectors. (Stream Team, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No objective.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek. Exact location was not reported.
Temporal Representation:	Samples were collected in Fall 2000 and Spring 2001.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43934, Benthic Community Effects

Region 9

Kit Carson Creek

LOE ID:	26403
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken on November 2000 and May 2003 at one sampling site. Of the total number of samples, all two of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 905KCCSDx on Kit Carson Creek.
Temporal Representation:	Sampling occurred during one event on November 2000 and May 2003.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring and Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43934, Benthic Community Effects
Kit Carson Creek

Region 9

LOE ID:	3252
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1999-2000. Ten of the 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Drive.
Temporal Representation:	Samples were collected in April-June 1999 and February-April 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43934, Benthic Community Effects
Kit Carson Creek

Region 9

LOE ID:	3249
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. Two of 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Dr.
Temporal Representation:	Samples were collected once each on 02/22/2000 and 03/06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33039	Region 9
Kit Carson Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Ten of 11 samples exceed the water quality objective

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 11 samples exceeded the 500 mg/L TDS for inland surface waters Basin Plan water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

**Line of Evidence (LOE) for Decision ID 33039, Total Dissolved Solids
Kit Carson Creek**

Region 9

LOE ID:	3252
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 1999-2000. Ten of the 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Drive.
Temporal Representation:	Samples were collected in April-June 1999 and February-April 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33090
Kit Carson Creek**

Region 9

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does not satisfy the data quantity requirements of section 6.1.5 of the Policy. QAQC information was not available
3. None of the two samples exceeded the 0.5 mg/L MCL for Picloram water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33090, Picloram
Kit Carson Creek**

Region 9

LOE ID:	3250
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Drive.
Temporal Representation:	Samples were collected once each on 02/22/2000 and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 32646
Kit Carson Creek**

Region 9

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A single sample was taken and it did not exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 4. The data satisfies the data quality requirements of section 6.1.4 of the Policy. 5. The data satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Only one sample exceeded the 0.004 mg/L MCL simazine criteria for inland surface water and domestic use. More data is needed to determine if the water quality objective is exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32646, Simazine Kit Carson Creek

Region 9

LOE ID:	3251
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. One sample was collected and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Drive.
Temporal Representation:	One sample was collected on 03/21/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

DECISION ID	33276	Region 9
Kit Carson Creek		

Pollutant: **Total Suspended Solids (TSS)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. There is not numerical guideline available to determine if water quality objective has been exceeded.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Only two samples were collected but an adequate guideline is not available to determine the allowable exceedance frequency listed in Table 3.1 of the Listing Policy.
3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33276, Total Suspended Solids (TSS)	Region 9
Kit Carson Creek	

LOE ID: 3253

Pollutant: Total Suspended Solids (TSS)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 1999. Two samples were collected. Their TSS concentrations ranged from 2.5-3.3 mg/L. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Drive.
Temporal Representation:	Samples were collected once each on 04/26/1999 and 05/24/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33400	Region 9
Kit Carson Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Turbidity Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.</p> <p>Application of table 3.2 for a conventional pollutant requires a minimum of five samples</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceeded the 5 NTU for inland turbidity water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. However, a less than 5 samples were collected, which is below the required number of sample size. 3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33400, Turbidity	Region 9
Kit Carson Creek	

LOE ID:	3254
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Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1999. None of the 3 samples were in exceedance. (SWRCB. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Drive.
Temporal Representation:	Samples were collected once each in 04/1999, 05/1999, and 06/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33352	Region 9
Kit Carson Creek		

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. An adequate number of samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 2 samples exceeded the 0.001 mg/L MCL for pentachlorophenol in inland surface waters,

water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33352, Pentachlorophenol (PCP)

Region 9

Kit Carson Creek

LOE ID:	3249
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. Two of 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kit Carson Creek at Sunset Dr.
Temporal Representation:	Samples were collected once each on 02/22/2000 and 03/06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Del Dios Creek](#)
Water Body ID: CAR9052100020011026104034
Water Body Type: River & Stream

DECISION ID	33263	Region 9
Del Dios Creek		

Pollutant: Chloride
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of three samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of three samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33263, Chloride	Region 9
Del Dios Creek	

LOE ID: 3256
Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Agricultural Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected by the City of San Diego Water Dept. from 04/1999 to 06/1999. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in Del Dios Creek at the "Rd crossing res at entra."
Temporal Representation:	One sample per day was collected on 04/26/1999, 05/24/1999, and 06/21/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33455	Region 9
Del Dios Creek		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The single sample taken did not exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33455, Mercury		Region 9
Del Dios Creek		

LOE ID:	3257
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 04/26/1999. The one sample collected was not in exceedance of the water quality objective.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at Del Dios Creek at the "Rd crossing res at entra."
Temporal Representation:	One sample was collected on 04/26/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32528	Region 9
Del Dios Creek		

Pollutant:	Nitrate as Nitrate (NO3)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 32528, Nitrate as Nitrate (NO3)		Region 9
Del Dios Creek		

LOE ID:	3259
Pollutant:	Nitrate as Nitrate (NO3)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 05/1999 and 06/1999. None of the 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Nitrate as NO3 is 45 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in Del Dios Creek at the "Rd crossing res at entra."
Temporal Representation:	One sample per day was collected on 05/24/1999 and 06/21/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32731	Region 9
Del Dios Creek		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the three samples exceed the secondary MSL drinking water standard.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the three samples exceed the secondary MSL drinking water standard and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of table 3.2. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32731, Sulfates**Region 9****Del Dios Creek**

LOE ID:	3258
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 06/1999. Three of 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Del Dios Creek at the "Rd crossing res at entra."
Temporal Representation:	One sample per day was collected on 04/26/1999, 05/24/1999, and 06/21/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**32545****Region 9****Del Dios Creek**

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the 3 samples exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy. According to Table 3.2 of the Listing Policy, a minimum sample size of 5 is necessary to determine if water quality standards are met.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32545, Total Dissolved Solids
Del Dios Creek**

Region 9

LOE ID:	3260
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 06/1999. Three of 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Del Dios Creek at the "Rd crossing res at entra."
Temporal Representation:	One sample per day was collected on 04/26/1999, 05/24/1999, 06/21/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

33499

Region 9

Del Dios Creek

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3

samples exceed the Basin Plan water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Basin Plan water quality objective for turbidity and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33499, Turbidity

Region 9

Del Dios Creek

LOE ID:	3261
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 06/1999. None of the 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Del Dios Creek at the "Rd crossing res at entra."
Temporal Representation:	One sample per day was collected on 04/26/1999, 05/24/1999, and 06/21/1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Green Valley Creek](#)
Water Body ID: CAR9052200020010926130745
Water Body Type: River & Stream

DECISION ID	33251	Region 9
Green Valley Creek		

Pollutant: Antimony
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the Basin Plan Objective for Antimony.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the Basin Plan Objective for Antimony and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33251, Antimony	Region 9
Green Valley Creek	

LOE ID: 3266
Pollutant: Antimony
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/2000 and 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected 03/13/2000, 03/21/200, and 04/18/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33251, Antimony Green Valley Creek

Region 9

LOE ID:	77762
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for antimony is .006 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

DECISION ID	32614	Region 9
Green Valley Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Objective for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the Basin Plan Objective for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32614, Arsenic	Region 9
Green Valley Creek	

LOE ID:	3267
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 04/1999, 03/2000, and 04/2000. None of the 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected on 04/26/1999, 03//13/2000, 03/21/2000, and 04/18/2000. One sample was collected on each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32614, Arsenic
Green Valley Creek

Region 9

LOE ID:	77763
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 32614, Arsenic

Region 9

Green Valley Creek

LOE ID:	77764
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	33391	Region 9
Green Valley Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the California Toxics Rule Objective for Cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33391, Cadmium
Green Valley Creek**

Region 9

LOE ID:	77766
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 33391, Cadmium
Green Valley Creek**

Region 9

LOE ID:	77765
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 33391, Cadmium
Green Valley Creek**

Region 9

LOE ID:	3270
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 04/1999, 03/2000, and 04/2000. None of the 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	One sample was collected each day on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33391, Cadmium

Region 9

Green Valley Creek

LOE ID:	73767
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the California Toxics Rule Objective for Chromium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33339, Chromium		Region 9
Green Valley Creek		
LOE ID:	73768	
Pollutant:	Chromium	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Cold Freshwater Habitat	
Number of Samples:	4	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chromium.	
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.	
SWAMP Data:	Non-SWAMP	

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/30/2007-6/3/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 33339, Chromium

Region 9

Green Valley Creek

LOE ID: 3272

Pollutant: Chromium (total)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. None of the 4 samples were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chromium is 0.05 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Green Valley Creek west of West Bernardo Drive.

Temporal Representation: One sample was collected each day on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID

46269

Region 9

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the Basin Plan Objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46269, Copper Green Valley Creek

Region 9

LOE ID: 77767

Pollutant: Copper
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Copper.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).

Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 46269, Copper
Green Valley Creek

Region 9

LOE ID:	73769
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 46269, Copper

Region 9

Green Valley Creek

LOE ID:	3273
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. None of the 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	One sample per day was collected on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	47585	Region 9
Green Valley Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Cypermethrin .</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of Zero samples exceeded the Water Quality Criteria for Cypermethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47585, Cypermethrin
Green Valley Creek**

Region 9

LOE ID:	73781
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47586

Region 9

Pollutant: Deltamethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the Evaluation Guideline for Deltamethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the Evaluation Guideline for Delthamethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47586, Deltamethrin Green Valley Creek

Region 9

LOE ID: 73782

Pollutant: Deltamethrin
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall

Objective/Criterion Reference:	not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47587	Region 9
Green Valley Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Water Quality Criteria for Diazinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47587, Diazinon	Region 9
Green Valley Creek	

LOE ID:	73783
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47587, Diazinon

Region 9

Green Valley Creek

LOE ID:	73784
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for

Data Reference:	Diazinon. Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water lifetime health advisory for diazinon is 1 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47648	Region 9
Green Valley Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the Evaluation Guideline for Esfenvalerate/Fenvalerate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the Evaluation Guideline for Esfenvalerate/Fenvalerate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

**Line of Evidence (LOE) for Decision ID 47648, Esfenvalerate/Fenvalerate
Green Valley Creek**
Region 9

LOE ID:	73785
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID 47649
Green Valley Creek**
Region 9

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 47649, Lead
Green Valley Creek**

Region 9

LOE ID:	73786
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]

Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47650	Region 9
Green Valley Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the four samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of four samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47650, Malathion		Region 9
Green Valley Creek		

LOE ID:	73787
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water lifetime health advisory for malathion is 500 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 47650, Malathion
Green Valley Creek**

Region 9

LOE ID:	73788
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	33069	Region 9
Green Valley Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Objective for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the Basin Plan Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33069, Nickel	Region 9
Green Valley Creek	

LOE ID:	3276
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. None of the 4 samples were in exceedance. (SWRCB, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	One sample was collected per day on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33069, Nickel

Region 9

Green Valley Creek

LOE ID:	73789
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33069, Nickel
Green Valley Creek

Region 9

LOE ID:	77768
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID **48586**
Green Valley Creek

Region 9

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Basin Plan Objective for Nitrate/Nitrite (Nitrite + Nitrate as N).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Basin Plan Objective for Nitrate/Nitrite (Nitrite + Nitrate as N) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48586, Nitrate/Nitrite (Nitrite + Nitrate as N)
Green Valley Creek**

Region 9

LOE ID: 77769

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48587	Region 9
Green Valley Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Basin Plan Objective for Nitrogen, Nitrite.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Basin Plan Objective for Nitrogen, Nitrite and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48587, Nitrogen, Nitrite	Region 9
Green Valley Creek	

LOE ID:	77770
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	33402	Region 9
Green Valley Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the Basin Plan Objective for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33402, Selenium
Green Valley Creek**

Region 9

LOE ID:	77772
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for selenium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 33402, Selenium
Green Valley Creek**

Region 9

LOE ID:	3277
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. None of 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	One sample per day was collected on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33402, Selenium

Region 9

Green Valley Creek

LOE ID:	77771
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

DECISION ID	47651	Region 9
Green Valley Creek		

Pollutant: Surfactants (MBAS)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Four of the Four samples exceed the Evaluation Guideline for Surfactants (MBAS).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceeded the Evaluation Guideline for Surfactants (MBAS) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47651, Surfactants (MBAS)	Region 9
Green Valley Creek	

LOE ID: 78034

Pollutant: Surfactants (MBAS)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for MBAS.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Secondary California Maximum Contaminant Level for MBAS is 0.5 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/30/2007-6/3/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	44219	Region 9
Green Valley Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. Samples were collected at one station over a six year period. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects

Region 9

Green Valley Creek

LOE ID:	73790
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Three of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 905SDC-TWAS-1 Green Valley Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects

Region 9

Green Valley Creek

LOE ID:	79556
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	9
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Nine of the eleven samples collected had an CSCI score below the 0.79 threshold, and is

Data Reference:	therefore exceeding the water quality objective for the aquatic life beneficial use. Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at station 905SDC-TWAS-1 (GVC-WB) on Green Valley Creek.
Temporal Representation:	The samples were collected from 2002 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects
Green Valley Creek

Region 9

LOE ID:	78032
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).

Guideline Reference: [Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/30/2007-6/3/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects

Region 9

Green Valley Creek

LOE ID: 26391

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Two samples of IBI data were taken on November 2000 and June of 2003 at one sampling site. Both of the samples exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation:	Samples were collected at one site: 905GVCWBx on Green Valley Creek.
Temporal Representation:	Sampling occurred during two events on November 2000 and June of 2003.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects	Region 9
Green Valley Creek	

LOE ID:	9033
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Green Valley Creek station 2, 905SDGVC2, on January 2003, April 2003, May 2003, and September 2003. All showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Green Valley Creek Station 2, 905SDGVC2; (Latitude 33.04342, Longitude -117.07557).
Temporal Representation:	Samples were collected on January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects**Region 9****Green Valley Creek**

LOE ID:	26719
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Ten samples of IBI data were taken on October 2002 to May 2007 at one sampling site. All ten of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: GVC-WB on Green Valley Creek.
Temporal Representation:	Sampling occurred during October 2002 and May and October from May 2003 to October 2006 and during May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects**Region 9****Green Valley Creek**

LOE ID:	73766
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44219, Benthic Community Effects

Region 9

Green Valley Creek

LOE ID:	73765
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven of the eleven samples collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions. IBI scale based on 1-70.
Guideline Reference:	
Spatial Representation:	The samples were collected at station GVC-WB on Green Valley Creek.
Temporal Representation:	The samples were collected in May and October 2002 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47583	Region 9
Green Valley Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the Two samples exceed the Water Quality Criteria for Bifenthrin, and Three of the Four samples exceeded the Objective for Water Toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of Two samples exceed the Water Quality Criteria for Bifenthrin and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47583, Bifenthrin	Region 9
Green Valley Creek	

LOE ID:	73766
Pollutant:	Bifenthrin

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47583, Bifenthrin
Green Valley Creek

Region 9

LOE ID:	73790
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Three of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyaella azteca</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 905SDC-TWAS-1 Green Valley Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	47584	Region 9
Green Valley Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 4 samples exceed the Water Quality Criteria for Chlorpyrifos, and Three of the Four samples exceeded the Objective for Water Toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 4 samples exceed the Water Quality Criteria for Chlorpyrifos and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47584, Chlorpyrifos	Region 9
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Green Valley Creek

LOE ID:	73790
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Three of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 905SDC-TWAS-1 Green Valley Creek.
Temporal Representation:	The samples were collected from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47584, Chlorpyrifos

Region 9

Green Valley Creek

LOE ID:	78033
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories 2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47584, Chlorpyrifos Green Valley Creek

Region 9

LOE ID:	78032
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Spatial Representation: Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]

Temporal Representation: Data was collected over the time period 11/30/2007-6/3/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	42727	Region 9
Green Valley Creek		

Pollutant: **Total Nitrogen as N**

Final Listing Decision: **List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.

According to table 3.1 of the Listing Policy, the minimum sample requirement to assess conventional pollutants is 2.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42727, Total Nitrogen as N	Region 9
Green Valley Creek	

LOE ID: 9033

Pollutant: Total Nitrogen as N

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Green Valley Creek station 2, 905SDGVC2, on January 2003, April 2003, May 2003, and September 2003. All showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Green Valley Creek Station 2, 905SDGVC2; (Latitude 33.04342, Longitude -117.07557).
Temporal Representation:	Samples were collected on January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	33345	Region 9
Green Valley Creek		
Pollutant:	Sulfates	
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.	

Three lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of 40 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-five of 40 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33345, Sulfates
Green Valley Creek**

Region 9

LOE ID:	9032
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Green Valley Creek station 2, 905SDGVC2 on January 2003, April 2003, May 2003, and September 2003. Three out of four samples showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Green Valley Creek station 2; 905SDGVC2; (Latitude 33.0433, Longitude -117.0755).
Temporal Representation:	Samples were collected on January 2003, April 2003, May 2003, and September 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 33345, Sulfates

Region 9

Green Valley Creek

LOE ID:	3262
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 07/2001. Fourteen of 23 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Sulfate is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected from 04/1999 to 07/2001. Three to 10 samples were collected per year, with multiple samples being collected on different days during the sampling months.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33345, Sulfates

Region 9

Green Valley Creek

LOE ID:	3279
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. Eight of 13 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sulfate is 250 mg/L. This is the concentration not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Green Valley Creek west of West Bernardo Drive.
Samples were collected from 04/26/1999 to 04/18/2000. Three samples were collected in 1999 (1 each in April, May, June) and 10 samples were collected in 2000, with multiple samples being collected each month in February, March, and April.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	32796	Region 9
Green Valley Creek		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of the three samples exceed the Basin Plan Objective for aluminum.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of three samples exceeded the Basin Plan Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 32796, Aluminum	Region 9
Green Valley Creek	

LOE ID:	3265
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/2000 and 04/2000. One of 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected 03/13/2000, 03/21/200, and 04/18/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32615	Region 9
Green Valley Creek		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32615, Barium		Region 9
Green Valley Creek		

LOE ID:	3268
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/2000 and 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected on 03/13/2000, 03/21/2000, and 04/18/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32616	Region 9
Green Valley Creek		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32616, Beryllium	Region 9
Green Valley Creek	

LOE ID:	3269
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/2000 and 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected on 03/13/2000, 03/21/2000, and 04/18/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33031	Region 9
Green Valley Creek		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33031, Mercury	Region 9
Green Valley Creek	

LOE ID: 3275

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 04/1999 and 02/2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Mercury is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected on 04/26/1999 and 02/14/2000. One sample was collected each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	32795	Region 9
Green Valley Creek		

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32795, Picloram	Region 9
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Green Valley Creek

LOE ID:	3264
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 02/15/2000 and 02/22/2000. None of the 2 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected on 02/15/2000 and 02/22/2000. One sample was collected on each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 33403

Region 9

Green Valley Creek

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 33403, Silver
Green Valley Creek**

Region 9

LOE ID:	3278
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. None of the 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	One sample per day was collected on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 33404
Green Valley Creek**

Region 9

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33404, Thallium

Region 9

Green Valley Creek

LOE ID: 3280

Pollutant: Thallium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 03/2000 and 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for thallium is 0.002 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation: One sample per day was collected on 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID

46270

Region 9

Green Valley Creek

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Basin Plan Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the Basin Plan Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46270, Zinc

Region 9

Green Valley Creek

LOE ID:	73791
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 46270, Zinc

Region 9

Green Valley Creek

LOE ID:	3281
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. None of the 4 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Zinc is 5.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	One sample per day was collected on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46270, Zinc

Region 9

Green Valley Creek

LOE ID:	77773
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Valley Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Green Valley Creek was collected at 1 monitoring site [Green Valley Creek - 905SDC-TWAS-1]
Temporal Representation:	Data was collected over the time period 11/30/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	33338	Region 9
Green Valley Creek		

Pollutant:	Chloride
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Six of 13 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 13 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33338, Chloride	Region 9
Green Valley Creek	

LOE ID: 3271

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. Six of 13 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chloride is 250 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected from 04/1999 to 04/2000. Three samples were collected in 1999 and 10 samples were collected in 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33340	Region 9
Green Valley Creek		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 4 samples exceeded the Basin Plan criteria and both years had exceedances more than 10% or the time. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33340, Manganese
Green Valley Creek**

Region 9

LOE ID:	3274
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on four days from 4/26/1999 to 4/18/2000. Four of 4 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Green Valley Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	One sample per day was collected on 04/26/1999, 03/13/2000, 03/21/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 46271
Green Valley Creek**

Region 9

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 2 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 46271, Pentachlorophenol (PCP)
Green Valley Creek**

Region 9

LOE ID:	3263
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 02/15/2000 and 02/22/2000. Two of 2 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Green Valley Creek west of West Bernardo Drive.
Temporal Representation:	Samples were collected on 02/15/2000 and 02/22/2000. One sample was collected on each day.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Felicita Creek](#)
Water Body ID: CAR9052300020010925131049
Water Body Type: River & Stream

DECISION ID	33312	Region 9
Felicita Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the California Toxics Rule objective for cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of nine samples exceeded the California Toxics Rule for cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33312, Cadmium	Region 9
Felicita Creek	

LOE ID: 73713
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33312, Cadmium

Region 9

Felicita Creek

LOE ID:	73714
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 33312, Cadmium

Region 9

Felicita Creek

LOE ID:	3290
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Cadmium is 0.005 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

DECISION ID

47393

Region 9

Felicita Creek

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six

samples exceed the Basin Plan Objective for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the Basin Plan Objective Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47393, Chlorpyrifos

Region 9

Felicita Creek

LOE ID:	73715
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47393, Chlorpyrifos	Region 9
Felicita Creek	

LOE ID: 78027

Pollutant: Chlorpyrifos
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
 Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]

Temporal Representation: Data was collected over the time period 8/12/2004-6/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	43082	Region 9
Felicita Creek		

Pollutant: Copper

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the Basin Plan Objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of nine samples exceeded the Basin Plan Objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43082, Copper

Region 9

Felicita Creek

LOE ID:	73721
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 43082, Copper**Region 9****Felicita Creek**

LOE ID:	3292
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Copper is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43082, Copper**Region 9****Felicita Creek**

LOE ID:	73720
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]

Temporal Representation: Data was collected 8/12/2004 - 6/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47394	Region 9
Felicita Creek		

Pollutant: Diazinon

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the Evaluation Guideline for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the Evaluation Guideline for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47394, Diazinon	Region 9
Felicita Creek	

LOE ID: 73722

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47394, Diazinon

Region 9

Felicita Creek

LOE ID:	78029
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47396	Region 9
Felicita Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the Evaluation Guideline for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the Evaluation Guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47396, Malathion	Region 9
Felicita Creek	

LOE ID: 73731

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47396, Malathion

Region 9

Felicita Creek

LOE ID:	78030
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

Objective/Criterion Reference:	sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	The USEPA drinking water health advisory for malathion is 100 Åµg/L. 2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 32552 Region 9	
Felicita Creek	
Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the Basin Plan Objective for zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of nine samples exceeded the Basin Plan Objective for zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32552, Zinc Region 9	
Felicita Creek	
LOE ID:	73733
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 32552, Zinc

Region 9

Felicita Creek

LOE ID:	73738
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]

Temporal Representation:

Data was collected 8/12/2004 - 6/11/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 32552, Zinc

Region 9

Felicita Creek

LOE ID: 3298

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance.(SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Zinc is 5.0 mg/L.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.

Temporal Representation: One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID 63386

Region 9

Felicita Creek

Pollutant: 1,4-Dioxane
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Hazardous Waste
Expected TMDL Completion: 2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. Nine of nine samples exceed the Objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 9 samples exceed the Objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 63386, 1,4-Dioxane

Region 9

Felicita Creek

LOE ID:	95688
Pollutant:	1,4-Dioxane
LOE Subgroup:	Subgroup Missing
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Samples were collected from three sites: FC-4, FC-10 and FC-7.
Data Reference:	Data for Felicita Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan, 2004)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Cal/EPA Cancer Potency Factor as a drinking water level of 1.3 ug/L
Guideline Reference:	
Spatial Representation:	Samples were collected from one station at the east fork (FC-4, 33.08374, -117.08470), and two stations at the main stem of the north Felicita Creek (FC-10, 33.08169, -117.08510; and FC-7, 33.079699, -117.084811, GPS approximates)
Temporal Representation:	Grab samples were collected between March 3, 2008 and March 10, 2010
Environmental Conditions:	
QAPP Information:	Sampling Activity was conducted in accordance with a 1993 QAPP which was updated in

DECISION ID	47398	Region 9
Felicita Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Six of the Six samples exceed the Single Sample Maximum Objective for Enterococcus, Three of the Six samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Two out of Six samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the Six samples exceed the Single Sample Maximum Objective for Enterococcus, Three of the Six samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Two out of Six samples exceeded the Single Sample Maximum Guideline for Total Coliform and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47398, Indicator Bacteria	Region 9
Felicita Creek	

LOE ID:	73724
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47398, Indicator Bacteria Felicita Creek

Region 9

LOE ID:	73723
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

Line of Evidence (LOE) for Decision ID 47398, Indicator Bacteria**Region 9****Felicita Creek**

LOE ID:	73732
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Felicita Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches, Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID**63384****Region 9****Felicita Creek**

Pollutant:	Tetrachloroethylene/PCE
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Industrial Point Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. 15 of 15 samples exceed the Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 15 of 15 samples exceed the Objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 63384, Tetrachloroethylene/PCE
Felicita Creek**

Region 9

LOE ID:	95655
Pollutant:	Tetrachloroethylene/PCE
LOE Subgroup:	Subgroup Missing
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Samples were collected from three sites: FC-4, FC-10 and FC-7. In the sampling period, nine samples were not included in the assessment because the RL is greater than the criterion of 0.8 ug/L
Data Reference:	Data for Felicita Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Criterion for Human Health Protection, Sources of Drinking Water (water and fish consumption) value of 0.8 ug/L to assess the data.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from one station at the east fork (FC-4, 33.08374, -117.08470), and two stations at the main stem of the north Felicita Creek (FC-10, 33.08169, -117.08510; and FC-7, 33.079699, -117.084811, GPS approximates)
Temporal Representation:	Grab samples were collected between March 3, 2008 and June 4, 2010
Environmental Conditions:	
QAPP Information:	Sampling Activity was conducted in accordance with a 1993 QAPP which was updated in 2011 (Appendix B of a Monitoring and Contingency Plan dated 2011)
QAPP Information Reference(s):	QA Document for data associated with Felicita Creek (north)

Pollutant:	Trichloroethylene/TCE
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Industrial Point Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. 14 of 24 samples exceed the Objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 14 of 24 samples exceed the Objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 63385, Trichloroethylene/TCE	Region 9
Felicita Creek	

LOE ID:	95654
Pollutant:	Trichloroethylene/TCE
LOE Subgroup:	Subgroup Missing
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	14
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Samples were collected from three sites: FC-4, FC-10 and FC-7.
Data Reference:	Data for Felicita Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Criterion for Human Health Protection, Sources of Drinking Water (water and fish consumption) value of 2.7 ug/L to assess the data.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from one station at the east fork (FC-4, 33.08374, -117.08470), and two stations at the main stem of the north Felicita Creek (FC-10, 33.08169, -117.08510; and FC-7, GPS to be added)

Temporal Representation: Grab samples were collected between March 3, 2008 and June 4, 2010

Environmental Conditions:

QAPP Information: Sampling Activity was conducted in accordance with a 1993 QAPP which was updated in 2011 (Appendix B of a Monitoring and Contingency Plan dated 2011)

QAPP Information Reference(s): [QA Document for data associated with Felicita Creek \(north\)](#)

DECISION ID	33343	Region 9
Felicita Creek		

Pollutant: Total Dissolved Solids
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-three of 24 samples exceeded the Basin Plan's water quality objective. The minimum number of samples required is 26 according to Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33343, Total Dissolved Solids	Region 9
Felicita Creek	

LOE ID: 3300

Pollutant: Total Dissolved Solids
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	21
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. Twenty of 21 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 04/26/1999 to 04/18/2000. One sample per month was collected in 1999 from April to June, and 2-3 samples per month were collected in 2000 from February to April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33343, Total Dissolved Solids

Region 9

Felicita Creek

LOE ID:	3301
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 06/1999. Three of 3 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL2, off Quiet Hills Farm Road.
Temporal Representation:	Samples were collected once per month in April, May and June of 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?

DECISION ID	33174	Region 9
Felicita Creek		

Pollutant: 2,4,5-TP (Silvex)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33174, 2,4,5-TP (Silvex)	Region 9
Felicita Creek	

LOE ID: 3315
Pollutant: 2,4,5-TP (Silvex)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 7
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 7 samples were in exceedance. (SDRWQCB, 2002-I)
Data Reference: [Placeholder reference 2006 303\(d\)](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 2,4,5-TP (Silvex) is 0.05 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.

Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 2 in March, and 3 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33173	Region 9
Felicita Creek		

Pollutant:	2,4-D (2,4-Dichlorophenoxy acetic acid)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33173, 2,4-D (2,4-Dichlorophenoxy acetic acid)	Region 9
Felicita Creek	

LOE ID:	3314
Pollutant:	2,4-D (2,4-Dichlorophenoxy acetic acid)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 7 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for 2,4-D is 0.07 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.

Temporal Representation:

Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 2 in March, and 3 in April.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

DECISION ID

33297

Region 9

Felicita Creek

Pollutant:

Alachlor

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:

Revision Status

Original

Impairment from Pollutant or

Pollutant

Pollution:

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision

Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33297, Alachlor

Region 9

Felicita Creek

LOE ID:

3305

Pollutant:

Alachlor

LOE Subgroup:

Pollutant-Tissue

Matrix:

Water

Fraction:

Total

Beneficial Use:

Municipal & Domestic Supply

Number of Samples:

5

Number of Exceedances:

0

Data and Information Type:

PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:

Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 5 samples were in exceedance. (SDRWQCB, 2002-I).

Data Reference:

[Placeholder reference 2006 303\(d\)](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for

Objective/Criterion Reference:	Alachlor is 0.002 mg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 2 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33248	Region 9
Felicita Creek		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33248, Antimony	Region 9
Felicita Creek	

LOE ID:	3286
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Antimony is 0.006 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33249	Region 9
Felicita Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33249, Arsenic	Region 9
Felicita Creek	

LOE ID:	3287
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for arsenic is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46214	Region 9
Felicita Creek		

Pollutant:	Atrazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46214, Atrazine	Region 9
Felicita Creek	

LOE ID:	3306
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of 6 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Atrazine is 0.003 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 3 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33480	Region 9
Felicita Creek		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33480, Barium	Region 9
Felicita Creek	

LOE ID:	3288
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for barium is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33298	Region 9
Felicita Creek		

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33298, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	Region 9
Felicita Creek	

LOE ID:	3307
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 6 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Benzo(a)pyrene is 0.0002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 3 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33277	Region 9
Felicita Creek		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33277, Beryllium	Region 9
Felicita Creek	

LOE ID:	3289
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Beryllium is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33214	Region 9
Felicita Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Chlordane Do Not List on 303(d) list (TMDL required list) Do Not List on 303(d) list (TMDL required list)(2012) Original Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Felicita Creek

LOE ID:	3308
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. on 03/13/2000 and 04/03/2000. None of 2 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chlordane is 0.0001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample was collected per day on 03/13/2000 and 04/03/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

33313

Region 9

Felicita Creek

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	

Line of Evidence (LOE) for Decision ID 33313, Chromium**Region 9****Felicita Creek**

LOE ID:	3291
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Chromium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID**33262****Region 9****Felicita Creek**

Pollutant:	Dinoseb
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33262, Dinoseb

Region 9

Felicita Creek

LOE ID:	3316
Pollutant:	Dinoseb
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 7 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Dinoseb is 0.007 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 2 in March, and 3 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

33478

Region 9

Felicita Creek

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33478, Endrin

Region 9

Felicita Creek

LOE ID:	3309
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 6 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Endrin is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 3 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

33479

Region 9

Felicita Creek

Pollutant:	Heptachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33479, Heptachlor
Felicita Creek**

Region 9

LOE ID:	3310
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 6 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 3 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**DECISION ID 33109
Felicita Creek**

Region 9

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33109, Heptachlor epoxide Felicita Creek	Region 9
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LOE ID:	3311
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 6 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Heptachlor epoxide is 0.00001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 3 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33414	Region 9
Felicita Creek		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33414, Hexachlorobenzene/ HCB

Region 9

Felicita Creek

LOE ID:	3303
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 6 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorobenzene is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 3 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

33296

Region 9

Felicita Creek

Pollutant:	Hexachlorocyclopentadiene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33296, Hexachlorocyclopentadiene	Region 9
Felicita Creek	

LOE ID:	3304
Pollutant:	Hexachlorocyclopentadiene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 6 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Hexachlorocyclopentadiene is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 3 in March and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the Basin Plan Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47395, Lead	Region 9
Felicita Creek	
LOE ID:	73730
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]

Temporal Representation: Data was collected 8/12/2004 - 6/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47395, Lead

Region 9

Felicita Creek

LOE ID: 73729

Pollutant: Lead

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Felicita Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Felicita Creek was collected at 1 monitoring site [Felicita Creek @ Quiet Hills Farm Road]

Temporal Representation: Data was collected 8/12/2004 - 6/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

33314

Region 9

Felicita Creek

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33314, Manganese Felicita Creek

Region 9

LOE ID:	3293
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. One of 3 samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The water quality objective for manganese in Felicita Creek is 0.05 milligrams/liter (mg/l) according to Basin Plan, Table 3-2 entitled, Water Quality Objectives. This concentration is not be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33110	Region 9
Felicita Creek		

Pollutant: Methoxychlor
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 6 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33110, Methoxychlor	Region 9
Felicita Creek	

LOE ID: 3312
Pollutant: Methoxychlor
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 6
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 6 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference: [Placeholder reference 2006 303\(d\)](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for methoxychlor is 0.04 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation: Samples were collected from 02/2000 to 04/2000. Two samples were collected in February,

3 in March, and 1 in April.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

DECISION ID	33252	Region 9
Felicita Creek		

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33252, Nickel	Region 9
Felicita Creek	

LOE ID: 3294

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nickel is 0.1 mg/L.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33329	Region 9
Felicita Creek		

Pollutant:	Nitrite as Nitrite NO2
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 33329, Nitrite as Nitrite NO2	Region 9
Felicita Creek	

LOE ID:	3299
Pollutant:	Nitrite as Nitrite NO2
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 04/1999 to 04/2000. None of the 7 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nitrite (as N) is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.

Temporal Representation:

Samples were collected from 04/26/1999 to 04/18/2000. One sample per month was collected in 1999 from April to June, and 2-3 samples per month were collected in 2000 from February to April.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

DECISION ID

33473

Region 9

Felicita Creek

Pollutant:

Pentachlorophenol (PCP)

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status

Original

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33473, Pentachlorophenol (PCP)

Region 9

Felicita Creek

LOE ID:

3283

Pollutant:

Pentachlorophenol (PCP)

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total

Beneficial Use:

Municipal & Domestic Supply

Number of Samples:

3

Number of Exceedances:

0

Data and Information Type:

PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:

Data were collected by the City of San Diego Water Dept. in 02/2000 and 03/2000. None of the 3 samples were in exceedance. (SDRWQCB, 2002-I).

Data Reference:

[Placeholder reference 2006 303\(d\)](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Pentachlorophenol is 0.001 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in Felicita Creek station FEL3 at the road crossing above the water line.
Temporal Representation:	One sample was collected per day on 02/29/2000, 02/22/2000, and 03/21/2000.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	42885	Region 9
Felicita Creek		

Pollutant:	Picloram
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42885, Picloram	Region 9
Felicita Creek	

LOE ID:	3284
Pollutant:	Picloram
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 7 samples were in exceedance. (SDRWQCB, 2002-I).

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Picloram is 0.5 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two to 3 samples were collected each month.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33253	Region 9
Felicita Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33253, Selenium		Region 9
Felicita Creek		

LOE ID:	3295
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Selenium is 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33254	Region 9
Felicita Creek		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33254, Silver	Region 9
Felicita Creek	

LOE ID:	3296
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance.(SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Silver is 0.1 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected once per day on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	46215	Region 9
Felicita Creek		

Pollutant:	Simazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46215, Simazine		Region 9
Felicita Creek		

LOE ID:	3313
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 5 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Simazine is 0.004 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/2000 to 04/2000. Two samples were collected in February, 1 in March, and 1 in April.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33255	Region 9
Felicita Creek		

Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33255, Thallium	Region 9
Felicita Creek	

LOE ID: 3297

Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. None of the 3 samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Thallium is 0.002 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	One sample per day was collected on 02/22/2000, 03/13/2000, and 04/18/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33413	Region 9
Felicita Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Basin Plan criteria, but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33413, Turbidity	Region 9
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Felicita Creek

LOE ID:	3302
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1999 from April to June. None of the 3 samples were in exceedance. (SDRWQCB, 2002-I).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected once per day on 04/26/1999, 05/24/1999, and 06/21/1999.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33247	Region 9
Felicita Creek		

Pollutant:	Aluminum
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Two of 6 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed
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in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle.

**Line of Evidence (LOE) for Decision ID 33247, Aluminum
Felicita Creek**

Region 9

LOE ID:	3285
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. from 02/2000 to 04/2000. Two of 6 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Aluminum is 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Felicita Creek site FEL3 at the road crossing above the water line.
Temporal Representation:	Samples were collected from 02/22/2000 to 04/18/2000. One sample was collected in 02/2000, 2 samples were collected in 03/2000, and 3 samples were collected in 04/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Cloverdale Creek](#)
Water Body ID: CAR9053200020010926112758
Water Body Type: River & Stream

DECISION ID	44129	Region 9
Cloverdale Creek		

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the three samples exceed the Basin Plan water quality objective for nitrogen.

According to table 3.1 of the Listing Policy, the minimum sample requirement to assess conventional pollutants is 2.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the three samples exceed the Basin Plan water quality objective for nitrogen and this exceeds the allowable frequency under Table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44129, Nitrogen	Region 9
Cloverdale Creek	

LOE ID: 9026
Pollutant: Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Cloverdale Creek station 905SDCDC4 on January 2003, April 2003, and May 2003. All three samples showed excessive nitrogen concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Cloverdale Creek station 4, 905SDCDC4; (Latitude 33.0905, Longitude -117.0197).
Temporal Representation:	Samples were collected on January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	34002	Region 9
Cloverdale Creek		
Pollutant:	Total Dissolved Solids	
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>	
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not</p>	

changed.

**Line of Evidence (LOE) for Decision ID 34002, Total Dissolved Solids
Cloverdale Creek**

Region 9

LOE ID: 4449

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Agricultural Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

**DECISION ID 42286
Cloverdale Creek**

Region 9

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the 3 samples exceed the secondary MCL of drinking water standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 3 samples exceed the secondary MCL of drinking water standard and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42286, Sulfates

Region 9

Cloverdale Creek

LOE ID:	9024
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Cloverdale Creek station 4, 905SDCDC4. Sample dates were January 2003, April 2003, and May 2003. All three samples showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Cloverdale Creek station 4, 905SDCDC4; (Latitude 33.0905, Longitude -117.0197).
Temporal Representation:	Samples were collected in January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

34001

Region 9

Cloverdale Creek

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 34001, Phosphorus Cloverdale Creek

Region 9

LOE ID:	4448
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Santa Maria Creek](#)
Water Body ID: CAR9054100020020306090409
Water Body Type: River & Stream

DECISION ID	51983	Region 9
Santa Maria Creek		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of two samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51983, Ammonia	Region 9
Santa Maria Creek	

LOE ID: 76531
Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected over the time period 6/25/2003-7/5/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49118	Region 9
Santa Maria Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Primary Maximum Contaminant Level and CTR criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the Primary Maximum Contaminant Level and CTR criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.11. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49118, Cadmium

Region 9

Santa Maria Creek

LOE ID:	76533
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected 6/25/2003 - 6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49118, Cadmium

Region 9

Santa Maria Creek

LOE ID:	76532
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected 6/25/2003 - 6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49273	Region 9
Santa Maria Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the aquatic life beneficial use guideline. The samples were not used in the assessment of Municipal & Domestic Supply due to reporting limits that were higher than the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.11. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49273, Chlorpyrifos

Region 9

Santa Maria Creek

LOE ID: 78135

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]

Temporal Representation: Data was collected over the time period 7/26/2007-6/1/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49273, Chlorpyrifos

Region 9

Santa Maria Creek

LOE ID: 76534

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected over the time period 7/26/2007-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49127	Region 9
Santa Maria Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Primary Maximum Contaminant Level and CTR criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the Primary Maximum Contaminant Level and CTR criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.11. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49127, Copper
Santa Maria Creek**

Region 9

LOE ID:	76538
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected 6/25/2003 - 6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49127, Copper
Santa Maria Creek**

Region 9

LOE ID:	76539
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected 6/25/2003 - 6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49280		Region 9
Santa Maria Creek		
Pollutant:	Diazinon	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the	

Line of Evidence (LOE) for Decision ID 49280, Diazinon**Region 9****Santa Maria Creek**

LOE ID:	76540
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected over the time period 7/26/2007-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49280, Diazinon**Region 9****Santa Maria Creek**

LOE ID:	78136
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected over the time period 7/26/2007-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51709	Region 9
Santa Maria Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Enterococcus 3 of 3 samples exceed the single sample objective for water contact recreation.</p> <p>Fecal coliform 2 of 3 samples exceed the single sample objective for water contact recreation.</p> <p>Total coliform 0 of 3 samples exceed the single sample objective for water contact recreation.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Samples and exceedences are as follows: <p>Enterococcus 3 of 3 samples exceed the single sample objective for water contact recreation.</p> <p>Fecal coliform 2 of 3 samples exceed the single sample objective for water contact recreation.</p> <p>Total coliform</p>

0 of 3 samples exceed the single sample objective for water contact recreation. The samples do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51709, Indicator Bacteria	Region 9
Santa Maria Creek	

LOE ID:	76541
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected over the time period 6/25/2003-7/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51709, Indicator Bacteria	Region 9
Santa Maria Creek	

LOE ID:	76551
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected over the time period 6/25/2003-7/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51709, Indicator Bacteria

Region 9

Santa Maria Creek

LOE ID:	76560
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxicsubstances in concentrations which are toxic to,or which produce detrimental physiologicalresponses in human, plant, animal, or indigenousaquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration

Guideline Reference: shall not exceed 10000 MPN/100 ml (CDPH 2006).
[Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.](#)

Spatial Representation: Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]

Temporal Representation: Data was collected over the time period 6/25/2003-7/24/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49130	Region 9
Santa Maria Creek		

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the beneficial use objective/criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the objective/criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.11.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49130, Lead	Region 9
Santa Maria Creek	

LOE ID: 76553

Pollutant: Lead
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected 6/25/2003 - 6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49130, Lead

Region 9

Santa Maria Creek

LOE ID:	76552
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]

Temporal Representation: Data was collected 6/25/2003 - 6/1/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49282	Region 9
Santa Maria Creek		

Pollutant: Malathion

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49282, Malathion	Region 9
Santa Maria Creek	

LOE ID: 78137

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected over the time period 7/26/2007-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49282, Malathion
Santa Maria Creek

Region 9

LOE ID:	76554
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [

Temporal Representation:	Santa Maria Creek @ Rangeland Road]
Environmental Conditions:	Data was collected over the time period 7/26/2007-6/1/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51984	Region 9
Santa Maria Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 51984, Nitrogen, Nitrite	Region 9
Santa Maria Creek	

LOE ID:	76555
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Santa Maria Creek to determine

Data Reference:	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected on a single day 6/25/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49269		Region 9
Santa Maria Creek		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the beneficial use objective/criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the objective/criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.11. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 49269, Zinc	Region 9
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Santa Maria Creek

LOE ID:	76561
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected 6/25/2003 - 6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49269, Zinc

Region 9

Santa Maria Creek

LOE ID:	76562
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Santa Maria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria Creek was collected at 1 monitoring site [Santa Maria Creek @ Rangeland Road]
Temporal Representation:	Data was collected 6/25/2003 - 6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Hatfield Creek](#)
Water Body ID: CAR9054400020020306091138
Water Body Type: River & Stream

DECISION ID	47761	Region 9
Hatfield Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47761, Cadmium	Region 9
Hatfield Creek	

LOE ID: 73822
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47761, Cadmium Hatfield Creek

Region 9

LOE ID:	73821
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47762	Region 9
Hatfield Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47762, Chlorpyrifos		Region 9
Hatfield Creek		

LOE ID:	73823
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47762, Chlorpyrifos Hatfield Creek

Region 9

LOE ID:	78038
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Âµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47763	Region 9
Hatfield Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the California Toxics Rule Objective for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47763, Copper	Region 9
Hatfield Creek	

LOE ID:	73824
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47763, Copper

Region 9

Hatfield Creek

LOE ID:	73825
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield

Temporal Representation:	Creek @ Magnolia Avenue]
Environmental Conditions:	Data was collected on a single day 7/26/2007.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47764	Region 9
Hatfield Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the water quality criteria for Diazanone.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the water quality criteria for Diazanone and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47764, Diazinon		Region 9
Hatfield Creek		

LOE ID:	78035
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47764, Diazinon

Region 9

Hatfield Creek

LOE ID:	73797
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]

Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47765	Region 9
Hatfield Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Single Sample Maximum Objective for Enterococcus, Zero out of One samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Zero out of One samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the One samples exceed the Single Sample Maximum Objective for Enterococcus, Zero out of One samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Zero out of One samples exceeded the Single Sample Maximum Guideline for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47765, Indicator Bacteria		Region 9
Hatfield Creek		

LOE ID:	73803
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47765, Indicator Bacteria Hatfield Creek

Region 9

LOE ID:	73799
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47765, Indicator Bacteria	Region 9
Hatfield Creek	

LOE ID:	73798
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47767	Region 9
Hatfield Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47767, Lead Hatfield Creek

Region 9

LOE ID:	73801
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s): Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

**Line of Evidence (LOE) for Decision ID 47767, Lead
Hatfield Creek**

Region 9

LOE ID: 73800

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]

Temporal Representation: Data was collected on a single day 7/26/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 47768

Region 9

Hatfield Creek

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47768, Malathion
Hatfield Creek**

Region 9

LOE ID:	73802
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47768, Malathion

Region 9

Hatfield Creek

LOE ID: 78036

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]

Temporal Representation: Data was collected on a single day 7/26/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 47770

Region 9

Hatfield Creek

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47770, Zinc

Region 9

Hatfield Creek

LOE ID:	73804
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47770, Zinc

Region 9

Hatfield Creek

LOE ID:	73805
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Hatfield Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hatfield Creek was collected at 1 monitoring site [Hatfield Creek @ Magnolia Avenue]
Temporal Representation:	Data was collected on a single day 7/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Los Penasquitos Creek](#)
Water Body ID: CAR9061000020011025112826
Water Body Type: River & Stream

DECISION ID	43248	Region 9
Los Penasquitos Creek		

Pollutant: Selenium
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the 46 samples exceeded the Water Quality Criteria for the protection of warm freshwater habitat of 0.005 mg/l of dissolved selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 46 samples exceeded the Water Quality Criteria for the protection of warm freshwater habitat of 0.005 mg/l of dissolved selenium, and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43248, Selenium	Region 9
Los Penasquitos Creek	

LOE ID: 77795
Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43248, Selenium

Region 9

Los Penasquitos Creek

LOE ID:	26869
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, January 2007. Samples were collected in November 2001 to February 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L.
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131, U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California; Rules and regulations, Federal Register Vol. 65, No. 97.

Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed at the north end of Sorrento Valley Court, under the Sorrento Valley Court Bridge.
Temporal Representation:	Samples were collected from November 2001 to February 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with Weston Solutions Quality Assurance Plan, 2004.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 43248, Selenium
Los Penasquitos Creek

Region 9

LOE ID:	7050
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Samples were collected for the Surface Water Ambient Monitoring Program. Samples were collected in March, April, June, and September 2002. Four samples were collected in this period and three exceeded the evaluation guideline for selenium.
Data Reference:	Surface Water Ambient Monitoring Program Data for selenium in Los Penasquitos Creek, March 2002 to September 2002
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency
Spatial Representation:	Water samples were collected at Los Penasquitos station 906LPLPC6; (Latitude 32.9036775, Longitude -117.2262075).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 42736
Los Penasquitos Creek

Region 9

Pollutant: Toxicity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

5 lines of evidence are available in the administrative record to assess pollutant. Ten of the 47 samples exceed the guideline for water toxicity. One of one sample exceeds the guideline for sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 47 samples exceed the guideline for water toxicity and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42736, Toxicity		Region 9
Los Penasquitos Creek		
LOE ID:	74174	
Pollutant:	Toxicity	
LOE Subgroup:	Toxicity	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	TOXICITY TESTING	
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the	

control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation:

The samples were collected from site 906_SMC00198, Los Penasquitos Creek.

Temporal Representation:

The samples were collected in June 2009.

Environmental Conditions:

QAPP Information:

This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 42736, Toxicity

Region 9

Los Penasquitos Creek

LOE ID: 74173

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 27

Number of Exceedances: 7

Data and Information Type:

TOXICITY TESTING

Data Used to Assess Water Quality:

Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of *Hyaella azteca*, growth of *Selenastrum capricornutum* and survival and reproduction of *Ceriodaphnia dubia*.

Data Reference:

[Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

[Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013](#)

Spatial Representation:

The samples were collected at stations 906LPC-MLS and 906LPC-TWAS-2 Los Penasquitos Creek.

Temporal Representation:

The samples were collected from 2001 to 2008.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 42736, Toxicity

Region 9

Los Penasquitos Creek

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42736, Toxicity

Region 9

Los Penasquitos Creek

LOE ID:	21387
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)

Data Used to Assess Water Quality:	Four samples were collected at Los Penasquitos Creek station 906LPLPC6 from March 2002 to September 2002, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples showed significant levels of toxicity. Ceriodaphnia dubia survival/reproductive test - one of the four samples.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at Los Penasquitos Creek station 906LPLPC6; (Latitude 32.9036775, Longitude -117.2262075).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42736, Toxicity

Region 9

Los Penasquitos Creek

LOE ID:	26872
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum: None of the 15 samples were found to exhibit toxicity.</p> <p>Hyalella azteca: None of the 15 samples were found to exhibit toxicity.</p> <p>Ceriodaphnia dubia- None of the fifteen samples were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. The samples were collected from November 2001 through February 2006.</p>
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than

Guideline Reference:	100% of the test sample concentration (San Diego Water Board, 2007). Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed at the north end of Sorrento Valley Court, under the Sorrento Valley Court Bridge
Temporal Representation:	The samples were collected from November 2001 through February 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality control was conducted in accordance with the Weston Solution's quality assurance program.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

DECISION ID 47474		Region 9
Los Penasquitos Creek		
Pollutant:	Arsenic	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>2 lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the CRITERIA for protection of the Aquatic Life beneficial uses.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 28 samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.	

Line of Evidence (LOE) for Decision ID 47474, Arsenic		Region 9
Los Penasquitos Creek		
LOE ID:	77792	
Pollutant:	Arsenic	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	

Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47474, Arsenic

Region 9

Los Penasquitos Creek

LOE ID:	74177
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]
Temporal Representation: Data was collected on a single day 6/3/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	47498	Region 9
Los Penasquitos Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 47498, Cadmium	Region 9
Los Penasquitos Creek	

LOE ID:	74189
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 47498, Cadmium

Region 9

Los Penasquitos Creek

LOE ID:	74190
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-TWAS-2, Los Peñasquitos Creek - 906LPC-MLS]

Temporal Representation:

Data was collected over the time period 11/29/2001-11/11/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	47502	Region 9
Los Penasquitos Creek		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47502, Chlordane	Region 9
Los Penasquitos Creek	

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47502, Chlordane
Los Penasquitos Creek

Region 9

LOE ID:	72825
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 906SUP076 (Penasquitos Creek @ Springbrook).
Temporal Representation:	The samples were collected on 1/8/2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47503	Region 9
Los Penasquitos Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion:

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 47503, Chromium	Region 9
Los Penasquitos Creek	

LOE ID:	74193
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-TWAS-2, Los Peñasquitos Creek - 906LPC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47503, Chromium	Region 9
Los Penasquitos Creek	

LOE ID:	74192
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]
Temporal Representation:	Data was collected on a single day 6/3/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	47499	Region 9
Los Penasquitos Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 47499, Copper	Region 9
Los Penasquitos Creek	

LOE ID:	74194
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 47499, Copper

Region 9

Los Penasquitos Creek

LOE ID:	74195
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-TWAS-2, Los Peñasquitos Creek - 906LPC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup

QAPP Information Reference(s):

DECISION ID	47539	Region 9
Los Penasquitos Creek		

Pollutant: Cyfluthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47539, Cyfluthrin	Region 9
Los Penasquitos Creek	

LOE ID: 72752

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47539, Cyfluthrin

Region 9

Los Penasquitos Creek

LOE ID:	74196
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g

Guideline Reference:	and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005). Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47540	Region 9
Los Penasquitos Creek		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47540, Cyhalothrin, Lambda	Region 9
Los Penasquitos Creek	

LOE ID:	74197
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

**Line of Evidence (LOE) for Decision ID 47540, Cyhalothrin, Lambda
Los Penasquitos Creek**

Region 9

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47541	Region 9
Los Penasquitos Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. <p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47541, Cypermethrin
Los Penasquitos Creek**

Region 9

LOE ID:	74198
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47541, Cypermethrin
Los Penasquitos Creek

Region 9

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI. U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47541, Cypermethrin
Los Penasquitos Creek

Region 9

LOE ID:	74199
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 47541, Cypermethrin

Region 9

Los Penasquitos Creek

LOE ID:	74200
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 9/27/2007-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47542	Region 9
Los Penasquitos Creek		

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47542, DDD (Dichlorodiphenyldichloroethane)	Region 9
Los Penasquitos Creek	

LOE ID:	74207
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Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47542, DDD (Dichlorodiphenyldichloroethane)

Region 9

Los Penasquitos Creek

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47549	Region 9
Los Penasquitos Creek		

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47549, DDE (Dichlorodiphenyldichloroethylene)**Region 9****Los Penasquitos Creek**

LOE ID:	74208
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47549, DDE (Dichlorodiphenyldichloroethylene)**Region 9****Los Penasquitos Creek**

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant

toxicity. The toxicity test included survival and growth of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference:

[Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data:

SWAMP

Water Quality Objective/Criterion:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference:

[Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064](#)

Spatial Representation:

The sample was collected at station 906SUP076.

Temporal Representation:

The sample was collected in January 2007.

Environmental Conditions:

QAPP Information:

All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47550	Region 9
Los Penasquitos Creek		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47550, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Los Penasquitos Creek

LOE ID:	74209
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47550, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Los Penasquitos Creek

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition, U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47553	Region 9
Los Penasquitos Creek		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47553, Deltamethrin
Los Penasquitos Creek**

Region 9

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47553, Deltamethrin
Los Penasquitos Creek

Region 9

LOE ID:	74210
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 9/27/2007-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47553, Deltamethrin

Region 9

Los Penasquitos Creek

LOE ID:	74211
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

47555

Region 9

Los Penasquitos Creek

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #74219, and 0 of 17 samples exceed the Criteria

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #74219, and 0 of 17 samples exceed the Criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47555, Diazinon
Los Penasquitos Creek**

Region 9

LOE ID:	74219
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]

Temporal Representation:	Data was collected over the time period 02/11/2005-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47555, Diazinon

Region 9

Los Penasquitos Creek

LOE ID:	74220
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

47556

Region 9

Los Penasquitos Creek

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47556, Dieldrin
Los Penasquitos Creek

Region 9

LOE ID: 72752

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47556, Dieldrin
Los Penasquitos Creek**

Region 9

LOE ID:	74221
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Pollutant: Endrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47557, Endrin

Region 9

Los Penasquitos Creek

LOE ID: 74222

Pollutant: Endrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47557, Endrin

Region 9

Los Penasquitos Creek

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47589	Region 9
Los Penasquitos Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47589, Esfenvalerate/Fenvalerate	Region 9
Los Penasquitos Creek	

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant

toxicity. The toxicity test included survival and growth of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference:

[Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data:

SWAMP

Water Quality Objective/Criterion:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference:

[Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064](#)

Spatial Representation:

The sample was collected at station 906SUP076.

Temporal Representation:

The sample was collected in January 2007.

Environmental Conditions:

QAPP Information:

All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47589, Esfenvalerate/Fenvalerate

Region 9

Los Penasquitos Creek

LOE ID:

74224

Pollutant:

Esfenvalerate/Fenvalerate

LOE Subgroup:

Pollutant-Sediment

Matrix:

Sediment

Fraction:

Total

Beneficial Use:

Warm Freshwater Habitat

Number of Samples:

1

Number of Exceedances:

0

Data and Information Type:

PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:

Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.

Data Reference:

[Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data:

SWAMP

Water Quality Objective/Criterion:

Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for

Guideline Reference:	esfenvalerate/fenvalerate from Amweg et al. (2005). Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 47589, Esfenvalerate/Fenvalerate
Los Penasquitos Creek**

Region 9

LOE ID:	74223
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 9/27/2007-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47602

Region 9

Los Penasquitos Creek

Pollutant: Fenpropathrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47602, Fenpropathrin Los Penasquitos Creek

Region 9

LOE ID: 72752

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47602, Fenprothrin Los Penasquitos Creek

Region 9

LOE ID:	74225
Pollutant:	Fenprothrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenprothrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenprothrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenprothrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
SWAMP data collected before September 2008 followed the QAMP 2002.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	47603	Region 9
Los Penasquitos Creek		

Pollutant:	Fipronil
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47603, Fipronil	Region 9
Los Penasquitos Creek	

LOE ID:	74226
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47603, Fipronil

Region 9

Los Penasquitos Creek

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant

Guideline Reference: compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
[Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064](#)

Spatial Representation: The sample was collected at station 906SUP076.

Temporal Representation: The sample was collected in January 2007.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 47604		Region 9
Los Penasquitos Creek		
Pollutant:	Fipronil Sulfide	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 47604, Fipronil Sulfide		Region 9
Los Penasquitos Creek		

LOE ID: 74227

Pollutant: Fipronil Sulfide

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 47604, Fipronil Sulfide
Los Penasquitos Creek

Region 9

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition, U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47607	Region 9
Los Penasquitos Creek		
Pollutant:	Fipronil Sulfone	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47607, Fipronil Sulfone**Region 9****Los Penasquitos Creek**

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyaella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition, U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47607, Fipronil Sulfone**Region 9****Los Penasquitos Creek**

LOE ID:	74228
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47500	Region 9
Los Penasquitos Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47500, Lead
Los Penasquitos Creek**

Region 9

LOE ID:	74229
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 47500, Lead
Los Penasquitos Creek**

Region 9

LOE ID:	74230
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-TWAS-2, Los Peñasquitos Creek - 906LPC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47608	Region 9
Los Penasquitos Creek		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47608, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Los Penasquitos Creek

LOE ID:	74231
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47608, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Los Penasquitos Creek

LOE ID: 72752

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47609	Region 9
Los Penasquitos Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 24 samples exceeded the GUIDELINE and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47609, Malathion
Los Penasquitos Creek**

Region 9

LOE ID:	74232
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	47504	Region 9
Los Penasquitos Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 47504, Nickel	Region 9
Los Penasquitos Creek	

LOE ID:	74234
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to

Objective/Criterion Reference:	protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-TWAS-2, Los Peñasquitos Creek - 906LPC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47504, Nickel
Los Penasquitos Creek

Region 9

LOE ID:	74233
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

DECISION ID	47551	Region 9
Los Penasquitos Creek		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47551, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)	Region 9
Los Penasquitos Creek	

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can

have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference: [Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition, U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064](#)

Spatial Representation: The sample was collected at station 906SUP076.

Temporal Representation: The sample was collected in January 2007.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47551, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Los Penasquitos Creek

LOE ID: 74237

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]

Temporal Representation: Data was collected on a single day 1/8/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	47501	Region 9
Los Penasquitos Creek		

Pollutant: Zinc

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceeded the criterion and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47501, Zinc	Region 9
Los Penasquitos Creek	

LOE ID: 74176

Pollutant: Zinc

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 25

Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-TWAS-2, Los Peñasquitos Creek - 906LPC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47501, Zinc
Los Penasquitos Creek

Region 9

LOE ID:	74175
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]

Temporal Representation:

Data was collected on a single day 6/3/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	43909	Region 9
Los Penasquitos Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Contaminated Sediments Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects	Region 9
Los Penasquitos Creek	

LOE ID: 72752

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects
Los Penasquitos Creek

Region 9

LOE ID:	74219
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 02/11/2005-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects

Region 9

Los Penasquitos Creek

LOE ID:	21387
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Los Penasquitos Creek station 906LPLPC6 from March 2002 to September 2002, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples showed significant levels of toxicity. Ceriodaphnia dubia survival/reproductive test - one of the four samples.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at Los Penasquitos Creek station 906LPLPC6; (Latitude 32.9036775, Longitude -117.2262075).

Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects	Region 9
Los Penasquitos Creek	

LOE ID:	74211
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects	Region 9
Los Penasquitos Creek	

LOE ID:	7336
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective of 1 mg/L outlined in results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, January 2007. Samples were collected one to four times a year from 2001-2006
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed at the north end of Sorrento Valley Court, under the Sorrento Valley Court Bridge.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality assurance conducted according to Weston Solution's quality assurance plan, 2004.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects
Los Penasquitos Creek

Region 9

LOE ID:	74200
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 9/27/2007-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects Los Penasquitos Creek

Region 9

LOE ID:	79572
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	9
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Of twenty-two samples taken at six stations along Los Penasquitos Creek, nine samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by

comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference: [The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation: Samples were taken at the following stations: 906LPLPC6 906PC-MLS SMC00198 906LPC-BMR 906PC-TWAS-2 906LPC-CCR

Temporal Representation: Surveys done from 2001 to 2009.

Environmental Conditions:

QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project, the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.

QAPP Information Reference(s): [RWB9 Status Sampling 2007 and 2008](#)
[Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)
[Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects Los Penasquitos Creek

Region 9

LOE ID: 7050

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Samples were collected for the Surface Water Ambient Monitoring Program. Samples were collected in March, April, June, and September 2002. Four samples were collected in this period and three exceeded the evaluation guideline for selenium.

Data Reference: [Surface Water Ambient Monitoring Program Data for selenium in Los Penasquitos Creek, March 2002 to September 2002](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97, Washington, D.C.: Environmental Protection Agency](#)

Spatial Representation: Water samples were collected at Los Penasquitos station 906LPLPC6; (Latitude 32.9036775, Longitude -117.2262075).

Temporal Representation: Samples were collected on March, April, June, and September 2002.
Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects
Los Penasquitos Creek

Region 9

LOE ID: 74187

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]

Temporal Representation: Data was collected over the time period 9/27/2007-11/11/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects
Los Penasquitos Creek

Region 9

LOE ID: 3321

Pollutant: Phosphate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, two samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream and flowing waters
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station at Los Penasquitos Creek: 32.90588 -117.22703.
Temporal Representation:	Four samples collected from March through September of 2002.
Environmental Conditions:	Los Penasquitos Creek, 906.10.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects

Region 9

Los Penasquitos Creek

LOE ID:	74185
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl

Spatial Representation: Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]

Temporal Representation: Data was collected on a single day 1/8/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects

Region 9

Los Penasquitos Creek

LOE ID: 3319

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: Data was collected in the Fall 2000 and Spring 2001 in Los Penasquitos Creek by the Stream Team. Bioassessment Metrics were used. The reported values are based on a average of 3 composite samples per site. From Fall 2000 to Spring 2001 there was a decrease in taxa richness, EPT index, average tolerance value, percent tolerant organisms, and percent predators. There was an increase in percent dominant taxa, and percent collectors, filterers and scrapers. (Stream Team, 2001).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Objective/Criterion Reference:

Evaluation Guideline: Guideline Reference:

Spatial Representation: Data set does not give a specific location in Los Penasquitos Creek.

Temporal Representation: Samples were collected in Fall of 2000 and in Spring of 2001.

Environmental Conditions: Changes in the Bioassessment Metrics levels may be due to seasonal effects and not necessarily water quality.

QAPP Information: QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects

Region 9

Los Penasquitos Creek

LOE ID: 3320

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The data was collected for the San Diego Regional Water Quality Control Board: 1999 Biological Assessment Annual Report. Bioassessment metrics were used to describe the characteristics of the macroinvertebrate community. Physical habitat scores for the two locations were in the middle range compared to other creeks in the region. BMI ranking scores for the two locations were at or above average 3 out of 4 times for both sampling sites, compared to other creeks in the region. (SDRWQCB, 1999a).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in Los Penasquitos Creek at 5 riffles upstream of Cobblestone Creek Rd. and 5 riffles upstream of Black Mountain Rd.
Temporal Representation:	The sampling occurred in May 1998, September 1998, November 1998, and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects

Region 9

Los Penasquitos Creek

LOE ID:	74181
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	20
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty of the twenty samples collected had an IBI score below 40. NPDES bioassessment.
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired

Guideline Reference:	conditions. A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The samples were collected at stations 906LPC-MLS, 906LPC-TWAS-2, LPC-BMR, and LPC-CCR on Los Peñasquitos Creek.
Temporal Representation:	The samples were collected in May and October 2001 to 2007.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects
Los Penasquitos Creek

Region 9

LOE ID:	74180
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 8.6. SMC bioassessment.
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at 906_SMC00198, Los Penasquitos Creek.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects
Los Penasquitos Creek

Region 9

LOE ID:	74179
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body is 9 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 906LPLPC6 (Los Penasquitos Creek 6).
Temporal Representation:	Surveys done May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects
Los Penasquitos Creek

Region 9

LOE ID:	77794
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for Chlorpyrifos. Three sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects

Region 9

Los Penasquitos Creek

LOE ID:	26436
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Sixteen samples of IBI data were taken from May 2001 to May 2007 at two sampling sites. Of the total number of samples, all sixteen the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two

Guideline Reference:	standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9) A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: LPC-BMR and LPC-CCR on Los Penasquitos Creek.
Temporal Representation:	Sampling occurred during May and October from 2001 to May 2006 and one event on May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects

Region 9

Los Penasquitos Creek

LOE ID:	26834
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Sixteen samples of IBI data were taken from May 1998 to June 2006 at four sampling sites. All 16 samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at four sites: LPC-BMR, LPC-CCR, 906LPLPC4, and 906LPLPC5 on Los Penasquitos Creek.
Temporal Representation:	Sampling occurred on one to three events from May 1998 to May 2001 annually for a period of four years and on June 2006.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure

Line of Evidence (LOE) for Decision ID 43909, Benthic Community Effects**Region 9****Los Penasquitos Creek**

LOE ID:	74173
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	The samples were collected at stations 906LPC-MLS and 906LPC-TWAS-2 Los Penasquitos Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID**47497****Region 9****Los Penasquitos Creek**

Pollutant:	Bifenthrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. For water samples, four of the four samples exceed the evaluation guideline of 0.0006 ug/l for bifenthrin for the protection of warm aquatic life, and seven out of 28 samples failed in toxicity tests. [For sediment samples, one of one sample exceeded the evaluation guideline for bifenthrin, and one of one sample failed in toxicity tests.]</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. For water samples, four of the four samples exceed the evaluation guideline of 0.0006 ug/l for bifenthrin for the protection of warm aquatic life, and seven out of 28 samples failed in toxicity tests, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 47497, Bifenthrin
Los Penasquitos Creek

Region 9

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level,

Guideline Reference:	AND less than the evaluation threshold. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition, U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47497, Bifenthrin
Los Penasquitos Creek

Region 9

LOE ID:	74174
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC00198, Los Penasquitos Creek.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47497, Bifenthrin
Los Penasquitos Creek

Region 9

LOE ID:	74173
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-seven samples were collected to test for toxicity. Seven of the 27 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	The samples were collected at stations 906LPC-MLS and 906LPC-TWAS-2 Los Penasquitos Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 47497, Bifenthrin
Los Penasquitos Creek**

Region 9

LOE ID:	74187
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 9/27/2007-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47497, Bifenthrin

Region 9

Los Penasquitos Creek

LOE ID:	74185
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl

Spatial Representation: Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]

Temporal Representation: Data was collected on a single day 1/8/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

Line of Evidence (LOE) for Decision ID 47497, Bifenthrin

Region 9

Los Penasquitos Creek

LOE ID: 78056

Pollutant: Bifenthrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Los Penasquitos Creek - 906_SMC00198]

Temporal Representation: Data was collected on a single day 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID 47517

Region 9

Los Penasquitos Creek

Pollutant: Chlorpyrifos

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. For water samples, two of the 21 samples exceed the evaluation guideline for chlorpyrifos, and seven of the 28 samples failed in toxicity tests. [For sediment samples, zero out of zero samples exceed the evaluation guideline for chlorpyrifos, and one out of one sample failed in toxicity tests.]

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 21 samples exceed the guideline for chlorpyrifos and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47517, Chlorpyrifos Los Penasquitos Creek

Region 9

LOE ID: 77794

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 21
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for Chlorpyrifos. Three sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San

Objective/Criterion Reference:	Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 2 monitoring sites [Los Peñasquitos Creek - 906LPC-MLS, Los Peñasquitos Creek - 906LPC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 47517, Chlorpyrifos

Region 9

Los Penasquitos Creek

LOE ID:	74191
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.
 QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

Line of Evidence (LOE) for Decision ID 47517, Chlorpyrifos	Region 9
Los Penasquitos Creek	

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI . U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33885	Region 9
Los Penasquitos Creek		

Pollutant:	Phosphate
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Delist from 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being re-considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 4 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 33885, Phosphate Los Penasquitos Creek

Region 9

LOE ID:	3321
Pollutant:	Phosphate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four water samples, two samples exceeding (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/l in stream and flowing waters
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station at Los Penasquitos Creek: 32.90588 -117.22703.

Temporal Representation:	Four samples collected from March through September of 2002.
Environmental Conditions:	Los Penasquitos Creek, 906.10.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	47615	Region 9
Los Penasquitos Creek		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the sediment chemistry guideline. One of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47615, Permethrin, total	Region 9
Los Penasquitos Creek	

LOE ID:	72752
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI . U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 906SUP076.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47615, Permethrin, total
Los Penasquitos Creek**

Region 9

LOE ID:	74235
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Los Penasquitos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The

Guideline Reference:	LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005). Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Los Penasquitos Creek was collected at 1 monitoring site [Penasquitos Creek @ Springbrook - 906SUP076]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 32613 Region 9	
Los Penasquitos Creek	
Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 one line of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of two samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32613, Turbidity Region 9	
Los Penasquitos Creek	
LOE ID:	3318
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Samples were collected by the RWQCB on 6/3/1998 at two sites in Los Penasquitos Creek. One sample was collected at each site. No samples were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For all inland surface waters with all beneficial uses, the WQO for Turbidity is 20 NTU. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos Creek at Cobblestone Creek Rd. and upstream of Black Mountain Rd.
Temporal Representation:	Samples were collected on 6/3/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	43282	Region 9
Los Penasquitos Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. 15 of the 15 samples exceed the objective for enterococcus and 11 of 15 samples exceed the objective for fecal coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of the 15 samples and 11 of 15 samples exceed the Basin Plan objectives this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 43282, Indicator Bacteria

Region 9

Los Penasquitos Creek

LOE ID:	7335
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, January 2007. Samples were collected one to four times a year from 2001-2006
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The criteria for enterococcus sets a maximum limit at 61 colonies per 100mL (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed at the north end of Sorrento Valley Court, under the Sorrento Valley Court Bridge.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality assurance conducted under Weston Solutions Quality Assurance Plan, March 2004.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 43282, Indicator Bacteria

Region 9

Los Penasquitos Creek

LOE ID:	7370
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	11
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Eleven of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, January 2007. Samples were collected one to four times a year from 2001-2006

Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed at the north end of Sorrento Valley Court, under the Sorrento Valley Court Bridge.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality assurance conducted according to Weston Solution's quality assurance plan, 2004.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

DECISION ID	42783	Region 9
Los Penasquitos Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Sixteen of the 19 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of the 19 samples exceed the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42783, Nitrogen	Region 9
Los Penasquitos Creek	

LOE ID:	7336
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective of 1 mg/L outlined in results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, January 2007. Samples were collected one to four times a year from 2001-2006
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed at the north end of Sorrento Valley Court, under the Sorrento Valley Court Bridge.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality assurance conducted according to Weston Solution's quality assurance plan, 2004.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 42783, Nitrogen
Los Penasquitos Creek

Region 9

LOE ID:	21387
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Los Penasquitos Creek station 906LPLPC6 from March

Data Reference:	2002 to September 2002, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples showed significant levels of toxicity. Ceriodaphnia dubia survival/reproductive test - one of the four samples. Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at Los Penasquitos Creek station 906LPLPC6; (Latitude 32.9036775, Longitude -117.2262075).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42783, Nitrogen

Region 9

Los Penasquitos Creek

LOE ID:	8813
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Urban Runoff Monitoring Report, January 2007. Samples were collected on; March 13, April 24, June 5, and September 18, 2002.
Data Reference:	Monitoring data for Region 9 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the monitoring station Los Peñasquitos Creek 6 (station id : 906LPLPC6 lat/long: 32.90588/-117.22703), located on the main stem of Los Peñasquitos Creek.
Temporal Representation:	Samples were collected on; March 13, April 24, June 5, and September 18, 2002.
Environmental Conditions:	The first two samples were taken during minimum and declining base flow respectively. The last two samples were taken during wet weather, between storm events and high base flow respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42783, Nitrogen
Los Penasquitos Creek

Region 9

LOE ID:	26872
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum: None of the 15 samples were found to exhibit toxicity. Hyalella azteca: None of the 15 samples were found to exhibit toxicity. Ceriodaphnia dubia- None of the fifteen samples were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. The samples were collected from November 2001 through February 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration (San Diego Water Board, 2007).
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed at the north end of Sorrento Valley Court, under the Sorrento Valley Court Bridge
Temporal Representation:	The samples were collected from November 2001 through February 2006.
Environmental Conditions:	Samples were collected during wet weather.

QAPP Information: Quality control was conducted in accordance with the Weston Solution's quality assurance program.

QAPP Information Reference(s): [Weston Solutions. 2004. Quality Management Manual. March 2004 \(Revised December 2009\).](#)

DECISION ID	32612	Region 9
Los Penasquitos Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 8 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency of table 3.2 in the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32612, Total Dissolved Solids	Region 9
Los Penasquitos Creek	

LOE ID:	3317
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data is from samples collected by the RWQCB and San Diego County from 6/3/1998 to 2/11/03 in Los Penasquitos Creek. Samples were collected at two sites; upstream of Black Mountain Rd and at Cobblestone Creek Rd. Eight of the 8 samples are in exceedance (SDRWQCB, 1998b; County of San Diego, 2003).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

From the Basin Plan, Table 3-2: For inland surface waters with all Beneficial Uses, the WQO for Total Dissolved Solids is 500mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at two locations in Los Penasquitos Creek: upstream of Black Mountain Rd. and at Cobblestone Creek Rd.

Temporal Representation:

Samples were collected from 6/3/1998-2/11/03.

Environmental Conditions:

QAPP Information:

Data used in 2002 Assessment.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Soledad Canyon](#)
Water Body ID: CAR9061000020011026104908
Water Body Type: River & Stream

DECISION ID	34023	Region 9
Soledad Canyon		

Pollutant: Sediment Toxicity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Five of 9 samples exceed the water quality objective for sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 9 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34023, Sediment Toxicity	Region 9
Soledad Canyon	

LOE ID: 3322
Pollutant: Sediment Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: Total
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Two out of four samples displayed statistically significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%. One of the four samples (collected April 24, 2002) also displayed statistically significant toxicity in the survival endpoint compared to the negative control, but this data point is not included in the total toxic samples as it had a data qualifier. All samples were tested using the 10-day Hyallela azteca test (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board (Region 9 Basin Plan, pages 3-15 to 3-16; September 8, 1994).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All samples were collected from one station, Soledad Canyon Creek 2.
Temporal Representation:	Samples were collected from March 2002 through September 2002. Toxicity in the survival endpoint was detected in samples collected on March 13, 2002 and September 18, 2002.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34023, Sediment Toxicity

Region 9

Soledad Canyon

LOE ID:	77160
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 906LPSOL4.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34023, Sediment Toxicity	Region 9
Soledad Canyon	

LOE ID:	21390
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Soledad Canyon Creek station 906LPSOL2 from March 2002 to September 2002, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples. Ceriodaphnia dubia survival/reproductive test - one of the four samples. Results were from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at Soledad Canyon Creek station 906LPSOL2; (Latitude 32.89116, Longitude -117.21268).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	50801	Region 9
Soledad Canyon		

Pollutant:	Anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50801, Anthracene Soledad Canyon

Region 9

LOE ID:	77118
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	52123	Region 9
Soledad Canyon		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52123, Arsenic	Region 9
Soledad Canyon	

LOE ID:	77123
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50802	Region 9
Soledad Canyon		

Pollutant:	Benzo(a)anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of
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16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50802, Benzo(a)anthracene
Soledad Canyon**

Region 9

LOE ID:	77125
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**DECISION ID 50803
Soledad Canyon**

Region 9

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50803, Benzo(a)pyrene (3,4-Benzopyrene -7-d)

Region 9

Soledad Canyon

LOE ID: 77126

Pollutant: Benzo(a)pyrene (3,4-Benzopyrene -7-d)

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50804	Region 9
Soledad Canyon		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50804, Bifenthrin		Region 9
Soledad Canyon		

LOE ID:	77127
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	52124	Region 9
Soledad Canyon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52124, Cadmium

Region 9

Soledad Canyon

LOE ID:	77130
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

50805

Region 9

Soledad Canyon

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 50805, Chlordane
Soledad Canyon

Region 9

LOE ID:	72821
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data were collected at the following station 906LPSOL4 Soledad Canyon Creek 4).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	50806	Region 9
Soledad Canyon		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50806, Chlorpyrifos	Region 9
Soledad Canyon	

LOE ID:	77131
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 52125 Region 9	
Soledad Canyon	
Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 52125, Chromium**Region 9****Soledad Canyon**

LOE ID:	77132
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID**50807****Region 9****Soledad Canyon**

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50807, Chrysene (C1-C4)

Region 9

Soledad Canyon

LOE ID:	77133
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	52126	Region 9
Soledad Canyon		

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52126, Copper	Region 9
Soledad Canyon	

LOE ID: 77134
Pollutant: Copper
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)
SWAMP Data: SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51110	Region 9
Soledad Canyon		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51110, Cyfluthrin	Region 9
Soledad Canyon	

LOE ID:	77946
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51111	Region 9
Soledad Canyon		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Cyhalothrin, Lambda Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51111, Cyhalothrin, Lambda
Soledad Canyon**

Region 9

LOE ID:	77948
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 51109, Cypermethrin	Region 9
Soledad Canyon	

LOE ID:	77949
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50808	Region 9
Soledad Canyon		

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50808, DDD (Dichlorodiphenyldichloroethane)	Region 9
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Soledad Canyon

LOE ID:	77138
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

50809

Region 9

Soledad Canyon

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50809, DDE (Dichlorodiphenyldichloroethylene)

Region 9

Soledad Canyon

LOE ID:	77139
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 50810

Region 9

Soledad Canyon

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50810, DDT (Dichlorodiphenyltrichloroethane) Soledad Canyon

Region 9

LOE ID:	77140
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51112	Region 9
Soledad Canyon		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51112, Deltamethrin	Region 9
Soledad Canyon	

LOE ID:	77954
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50811	Region 9
Soledad Canyon		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50811, Diazinon
Soledad Canyon**

Region 9

LOE ID:	77955
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

**DECISION ID 50812
Soledad Canyon**

Region 9

Pollutant: Dieldrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50812, Dieldrin

Region 9

Soledad Canyon

LOE ID: 77143

Pollutant: Dieldrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	50813	Region 9
Soledad Canyon		

Pollutant: Endrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50813, Endrin	Region 9
Soledad Canyon	

LOE ID: 77144

Pollutant: Endrin

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51113	Region 9
Soledad Canyon		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51113, Esfenvalerate/Fenvalerate
Soledad Canyon**

Region 9

LOE ID:	77956
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**DECISION ID 51114
Soledad Canyon**

Region 9

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51114, Fenpropathrin Soledad Canyon

Region 9

LOE ID:	77957
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca.

Spatial Representation: Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	51097	Region 9
Soledad Canyon		

Pollutant: Fluoranthene

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51097, Fluoranthene	Region 9
Soledad Canyon	

LOE ID: 77147

Pollutant: Fluoranthene

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Agua Hedionda Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Agua Hedionda Creek was collected at 1 monitoring site [Agua Hedionda Creek 6 - 904CBAHC6]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51098	Region 9
Soledad Canyon		

Pollutant:	Fluorene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51098, Fluorene

Region 9

Soledad Canyon

LOE ID:	77148
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

51101

Region 9

Soledad Canyon

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51101, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Soledad Canyon

LOE ID:	77958
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
SWAMP data collected before September 2008 followed the 2002 QAMP.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	51102	Region 9
Soledad Canyon		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51102, Methyl Parathion	Region 9
Soledad Canyon	

LOE ID:	77959
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51103	Region 9
Soledad Canyon		

Pollutant:	Naphthalene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51103, Naphthalene

Region 9

Soledad Canyon

LOE ID:	77149
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

52127

Region 9

Soledad Canyon

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52127, Nickel
Soledad Canyon**

Region 9

LOE ID:	77150
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51104	Region 9
Soledad Canyon		

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51104, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
Soledad Canyon	

LOE ID: 77151
Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51105	Region 9
Soledad Canyon		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51105, PCBs (Polychlorinated biphenyls)	Region 9
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Soledad Canyon

LOE ID:	72814
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 906LPSOL4 (Soledad Canyon Creek 4).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

51116

Region 9

Soledad Canyon

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51116, Permethrin, total
Soledad Canyon**

Region 9

LOE ID:	77152
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

**DECISION ID
Soledad Canyon**

51106

Region 9

Pollutant: Phenanthrene

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51106, Phenanthrene
Soledad Canyon

Region 9

LOE ID: 77153

Pollutant: Phenanthrene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effects level (predictive of sediment toxicity) for

Guideline Reference:	Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000) Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51107	Region 9
Soledad Canyon		

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51107, Pyrene	Region 9
Soledad Canyon	

LOE ID:	77154
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [Soledad Canyon Creek 4 - 906LPSOL4]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51108	Region 9
Soledad Canyon		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51108, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Soledad Canyon

LOE ID:	77159
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Juan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Juan Creek was collected at 1 monitoring site [San Juan Creek 9 - 901SJSJC9]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

52128

Region 9

Soledad Canyon

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52128, Zinc**Region 9****Soledad Canyon**

LOE ID: 77161

Pollutant: Zinc
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Soledad Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Soledad Canyon was collected at 1 monitoring site [

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Soledad Canyon Creek 4 - 906LPSOL4]
Data was collected on a single day 5/21/2008.
Staff is not aware of any special conditions that might affect interpretation of the data.
SWAMP data collected before September 2008 followed the 2002 QAMP.
[Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID	44274	Region 9
Soledad Canyon		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown Unknown Nonpoint Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the three samples exceed the water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Three of the four samples exceed the water quality objective for selenium and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 44274, Selenium	Region 9
Soledad Canyon	

LOE ID:	7578
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Soledad Canyon Creek station 906LPSOL2 in March, April, June, and September 2002. Two samples showed excessive selenium concentration according to results in the Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA
Spatial Representation:	Water samples were collected at Soledad Canyon Creek station 906LPSOL2; (Latitude 32.8911675, Longitude -117.2126625).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey. CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Rattlesnake Creek](#)
Water Body ID: CAR9062000020011025132339
Water Body Type: River & Stream

DECISION ID	44296	Region 9
Rattlesnake Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 5 of 5 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 5 of 5 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy, however as required under section 3.9 of the Listing Policy, pollutant(s) could not be directly associated with the Benthic Community Effects.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44296, Benthic Community Effects	Region 9
Rattlesnake Creek	

LOE ID: 3325
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Not Specified
Fraction: None
Beneficial Use: Agricultural Supply

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected for the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report. Physical habitat scores at RC-HP ranged from 62-79, slightly lower, compared to other sampled waterbodies. BMI scores at RC-HP were all near (slightly above or below) average for all sampling months. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Rattlesnake Creek, 5 riffles adjacent of Hillary Park (RC-HP).
Temporal Representation:	Samples were collected in May, September, and November 1998, and May 1999.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44296, Benthic Community Effects

Region 9

Rattlesnake Creek

LOE ID:	26441
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Five samples of IBI data were taken from May 1998 to June 2000 at one sampling site. Of the total number of samples, all five samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13

Spatial Representation:	Samples were collected at one site: 906RCHPxx on Rattlesnake Creek.
Temporal Representation:	Sampling occurred during one to three events over a three year period from May 1998 to June 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring and Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID	43597	Region 9
Rattlesnake Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample collected exceeded the Basin Plan water quality objective for total dissolved solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample collected exceeded the Basin Plan water quality objective for total dissolved solids and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 43597, Total Dissolved Solids		Region 9
Rattlesnake Creek		

LOE ID:	3323
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample was collected at Rattlesnake Creek at Hilleary Park, off Community Road.
Temporal Representation:	One sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33790	Region 9
Rattlesnake Creek		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line of evidence is necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. The one sample collected did not exceed the Basin Plan water quality objective for turbidity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample collected did not exceed the Basin Plan water quality objective for turbidity, and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33790, Turbidity

Region 9

Rattlesnake Creek

LOE ID:	3324
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by RWQCB9 in 1998. One sample was collected and was not in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sample was collected at Rattlesnake Creek at Hilleary Park, off Community Road.
Temporal Representation:	One sample was collected on 06/03/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Rose Creek](#)
Water Body ID: CAR9064000020011025132732
Water Body Type: River & Stream

DECISION ID	43399	Region 9
Rose Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. Four of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of five samples exceeded the objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43399, Toxicity	Region 9
Rose Creek	

LOE ID:	21389
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Rose Canyon Creek station 906LPRSC4 from March 2002 to September 2002 and they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples. Ceriodaphnia dubia survival/reproductive test - two of the four samples were toxic. Results were from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Rose Canyon Creek station 906LPRSC4; (Latitude 33.1299, Longitude -117.1924).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43399, Toxicity

Region 9

Rose Creek

LOE ID:	75546
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there

is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation:

The samples were collected from site 906_SMC01606, Rose Canyon.

Temporal Representation:

The samples were collected in May 2009.

Environmental Conditions:

QAPP Information:

This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

DECISION ID	48570	Region 9
Rose Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48570, Arsenic	Region 9
Rose Creek	

LOE ID: 75533

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Rose Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48594	Region 9
Rose Creek		
Pollutant:	Bifenthrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48594, Bifenthrin

Region 9

Rose Creek

LOE ID: 78086

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Rose Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]

Temporal Representation: Data was collected on a single day 5/26/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID

48573

Region 9

Rose Creek

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48573, Cadmium

Region 9

Rose Creek

LOE ID:	75538
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Rose Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48580	Region 9
Rose Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48580, Chromium	Region 9
Rose Creek	

LOE ID:	75540
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rose Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48581	Region 9
Rose Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48581, Copper	Region 9
Rose Creek	

LOE ID:	75541
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rose Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48597	Region 9
Rose Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48597, Cypermethrin
Rose Creek**

Region 9

LOE ID:	78087
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Rose Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48582, Lead		Region 9
Rose Creek		
LOE ID:	75543	
Pollutant:	Lead	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rose Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each	

Objective/Criterion Reference:	sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48595	Region 9
Rose Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48595, Nickel	Region 9
Rose Creek	

LOE ID:	75544
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rose Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48596	Region 9
Rose Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48596, Zinc

Region 9

Rose Creek

LOE ID:	75547
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Rose Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID

43634

Region 9

Rose Creek

Pollutant: Benthic Community Effects
Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water segment exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43634, Benthic Community Effects Rose Creek

Region 9

LOE ID:	26724
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Ten samples of IBI data were taken from October 2002 to May 2007 at one sampling site. Of the total number of samples, all ten samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as

Objective/Criterion Reference:	specified by the Regional Board. (SDRWQCB, 1995) Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: MB-RC on Rose Creek.
Temporal Representation:	Sampling occurred on October 2002 and during May and October from 2003 to 2006 and one event on May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43634, Benthic Community Effects

Region 9

Rose Creek

LOE ID:	78086
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Rose Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Rose Creek

LOE ID:	79613
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	A total of twelve samples were taken at three stations on Rose Creek. Nine samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Two samples were not scored due to low organism counts.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 906LPRSC4, SMC01606, 906MB-RC
Temporal Representation:	Surveys done from 2002 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project, the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

LOE ID:	21389
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Rose Canyon Creek station 906LPRSC4 from March 2002 to September 2002 and they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples. Ceriodaphnia dubia survival/reproductive test - two of the four samples were toxic. Results were from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Rose Canyon Creek station 906LPRSC4; (Latitude 33.1299, Longitude -117.1924).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43634, Benthic Community Effects
Rose Creek

Region 9

LOE ID:	75536
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven of the eleven samples collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The samples were collected at stations MB-RC and MB-TWAS-1 on Rose Creek.
Temporal Representation:	The samples were collected in May and October 2002 to 2007 and in May 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43634, Benthic Community Effects Rose Creek

Region 9

LOE ID:	7935
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Rose Canyon Creek station. Three samples showed excessive selenium concentrations according to results in the Surface Water Ambient Monitoring Program Report from 2007. Samples were collected on March, April, June, and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA
Spatial Representation:	Water samples were collected at Rose Canyon Creek station 906LPRSC4; (Latitude 32.8371625, Longitude -117.23298).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43634, Benthic Community Effects

Region 9

Rose Creek

LOE ID:	75535
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 1 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 906LPRSC4-Rose Canyon Creek 4.
Temporal Representation:	Surveys done May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43634, Benthic Community Effects

Region 9

Rose Creek

LOE ID:	78087
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Rose Creek to determine

Data Reference:	beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total. Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Rose Creek was collected at 1 monitoring site [Rose Canyon - 906_SMC01606]
Temporal Representation:	Data was collected on a single day 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID		33036	Region 9
Rose Creek			
Pollutant:	Diazinon		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)		
Revision Status	Original		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of four of the samples exceed the Ca. Dept. of Fish & Game guideline water quality objective for diazinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of four of the samples exceed the Ca. DFG guideline water quality objective for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 		
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.		

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33036, Diazinon

Region 9

Rose Creek

LOE ID: 3326

Pollutant: Diazinon
LOE Subgroup: Adverse Biological Responses
Matrix: -N/A
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: One of 4 samples exceeding the CDFG guideline. (SWAMP, 2004).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline: CDFG Aquatic life toxicity one hour average 0.16 ug/L. (Siepman & Finlayson, 2000; Finlayson, 2004).
Guideline Reference: [Placeholder reference 2006 303\(d\)](#)

Spatial Representation: One sample station at Rose Canyon Creek: 32.83703 -117.23178.
Temporal Representation: Samples were collected from March through October 2002.
Environmental Conditions: Rose Canyon Creek Watershed: 906.40.
QAPP Information: SWAMP Quality Assurance Plan.
QAPP Information Reference(s):

DECISION ID

36872

Region 9

Rose Creek

Pollutant: Selenium
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Natural Sources | Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of four of

the samples exceed the California Toxics Rule water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of four of the samples exceed the California Toxics Rule water quality objective for selenium, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36872, Selenium

Region 9

Rose Creek

LOE ID:	21389
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Rose Canyon Creek station 906LPRSC4 from March 2002 to September 2002 and they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the four samples. Ceriodaphnia dubia survival/reproductive test - two of the four samples were toxic. Results were from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Rose Canyon Creek station 906LPRSC4; (Latitude 33.1299, Longitude -117.1924).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Rose Creek

LOE ID:	7935
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Rose Canyon Creek station. Three samples showed excessive selenium concentrations according to results in the Surface Water Ambient Monitoring Program Report from 2007. Samples were collected on March, April, June, and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Rose Canyon Creek station 906LPRSC4; (Latitude 32.8371625, Longitude -117.23298).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Tecolote Creek](#)
Water Body ID: CAR9065000019990208103941
Water Body Type: River & Stream

DECISION ID	37924	Region 9
Tecolote Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. Two of the 19 samples exceed the Criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 19 samples exceeded the Criteria. This does not meet the minimum sample size for delisting under Section 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37924, Cadmium	Region 9
Tecolote Creek	

LOE ID: 4734
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37924, Cadmium

Region 9

Tecolote Creek

LOE ID:	78173
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and

QAPP Information Reference(s):

Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed. [Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work. and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	33826	Region 9
Tecolote Creek		

Pollutant: **Copper**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. One of the 17 samples exceed the Criteria.

Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 17 samples exceeded the Criteria and this does not meet the the minimum sample size listed in Section 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33826, Copper	Region 9
Tecolote Creek	

LOE ID: 4735

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

2006.
 Data Reference: [Placeholder reference pre-2006 303\(d\)](#)
 SWAMP Data: Non-SWAMP
 Water Quality Objective/Criterion: Unspecified
 Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)
 Evaluation Guideline: Unspecified
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)
 Spatial Representation: Unspecified
 Temporal Representation: Unspecified
 Environmental Conditions: Unspecified
 QAPP Information: Unspecified
 QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33826, Copper
 Tecolote Creek**

Region 9

LOE ID: 77037
 Pollutant: Copper
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None
 Beneficial Use: Warm Freshwater Habitat
 Number of Samples: 17
 Number of Exceedances: 1
 Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Copper.
 Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)
 SWAMP Data: Non-SWAMP
 Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
 Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)
 Evaluation Guideline:
 Guideline Reference:
 Spatial Representation: Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
 Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
 QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Pollutant:	Lead
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess pollutant. Zero of the 17 samples exceed the Criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 17 samples exceeded the Criteria. This does not meet the minimum sample size for delisting under Section 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33829, Lead	Region 9
Tecolote Creek	

LOE ID:	77075
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33829, Lead

Region 9

Tecolote Creek

LOE ID:	4737
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

42796

Region 9

Tecolote Creek

Pollutant:	Selenium
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess pollutant. Zero of the 19 samples exceed the Criteria for the line of evidence since the prior listing.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 19 samples exceeded the Criteria since the prior listing. This does not meet the minimum sample size for delisting under Section 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42796, Selenium Tecolote Creek

Region 9

LOE ID:	7579
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three water samples were collected at Tecolote Creek station 906LPTEC3 on March, April, June, and September 2002. All three samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June, and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007). CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline: Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Tecolote Creek station 906LPTEC3; (Latitude 33.7768533, Longitude -117.18618).
Temporal Representation:	Samples were collected in March, April, and June 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42796, Selenium

Region 9

Tecolote Creek

LOE ID:	78181
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess pollutant. In this cycle, six of the 19 samples exceed the evaluation guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 19 samples exceeded the evaluation guideline, and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36097, Toxicity	Region 9
Tecolote Creek	
LOE ID:	77091
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected to test for toxicity. Six of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 906TC-MLS Tecolote Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 36097, Toxicity

Region 9

Tecolote Creek

LOE ID:	4738
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

33849

Region 9

Tecolote Creek

Pollutant:	Zinc
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess pollutant. Zero of the 17 samples exceed the Criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 17 samples exceeded the Criteria. This does not meet the minimum sample size for delisting under Section 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33849, Zinc

Region 9

Tecolote Creek

LOE ID:	77092
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]

Temporal Representation:

Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 33849, Zinc

Region 9

Tecolote Creek

LOE ID: 4739

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID 36746

Region 9

Tecolote Creek

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by: 06/22/2011

USEPA: Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Enterococcus 56 of 77 samples exceed the single sample objective for water contact recreation.</p> <p>Fecal coliform 39 of 77 samples exceed the single sample objective for water contact recreation.</p> <p>Total coliform 4 of 4 samples exceed the single sample objective for water contact recreation.</p> <p>The Indicator bacteria LOE is a placeholder to support a 303(d) listing decision made prior to 2006.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Samples and exceedences are as follows: <p>Enterococcus 56 of 77 samples exceed the single sample objective for water contact recreation.</p> <p>Fecal coliform 39 of 77 samples exceed the single sample objective for water contact recreation.</p> <p>Total coliform 4 of 4 samples exceed the single sample objective for water contact recreation.</p> <p>The Indicator bacteria LOE is a placeholder to support a 303(d) listing decision made prior to 2006.</p> <p>The enterococcus and fecal coliform samples exceed the allowable frequency listed in Table 4.2 of the Listing Policy. The total coliform sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.</p> <ol style="list-style-type: none"> 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36746, Indicator Bacteria		Region 9
Tecolote Creek		
LOE ID:	77074	
Pollutant:	Fecal Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	77	
Number of Exceedances:	39	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	Thirty-nine of the seventy-seven samples exceeded the fecal Coliform objective.	
Data Reference:	Data for Various Pollutants in the City of San Diego Tecolote Creek, 2007-2010.	

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from 22 stations on Tecolote Creek.
Temporal Representation:	Samples were collected between September 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. The data was collected for the Tecolote Creek Bacterial Source Tracking Investigation and used for background for the City of San Diego Bacteria TMDL.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36746, Indicator Bacteria

Region 9

Tecolote Creek

LOE ID:	4736
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36746, Indicator Bacteria

Region 9

Tecolote Creek

LOE ID:	72772
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the four samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in the City of San Diego Tecolote Creek, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The total coliform concentration shall not exceed more than 10,000/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from 3 stations on Tecolote Creek.
Temporal Representation:	Samples were collected between September 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. The data was collected for the Tecolote Creek Bacterial Source Tracking Investigation and used for background for the City of San Diego Bacteria TMDL.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36746, Indicator Bacteria Tecolote Creek

Region 9

LOE ID:	77058
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	77
Number of Exceedances:	56
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-six of the seventy-seven samples exceeded the enterococcus objective.
Data Reference:	Data for Various Pollutants in the City of San Diego Tecolote Creek, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The enterococcus concentration shall not exceed more than 61/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from 22 stations on Tecolote Creek.
Temporal Representation:	Samples were collected between September 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. The data was collected for the Tecolote Creek Bacterial Source Tracking Investigation and used for background for the City of San Diego Bacteria TMDL.
QAPP Information Reference(s):	

DECISION ID

53184

Region 9

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 19 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53184, Arsenic
Tecolote Creek

Region 9

LOE ID: 78170

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Arsenic.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]

Temporal Representation:

Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	33284	Region 9
Tecolote Creek		

Pollutant: Benthic-Macroinvertebrate Bioassessments
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.
This conclusion is based on the following:
The single line of evidence in the record to assess this pollutant consists of bioassessment data. California Stream Index scores were not calculated for prior listing cycles.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.

Line of Evidence (LOE) for Decision ID 33284, Benthic-Macroinvertebrate Bioassessments	Region 9
Tecolote Creek	

LOE ID: 3327

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Not Specified
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Bioassessments were done by the San Diego Regional Water Quality Control Board in 1998 and 1999. Physical habitat scores and BMI ranking scores were given to each sampling site. Relative to other waterbodies in the study, the Tecolote Creek had medium to high physical

habitat quality. Relative to the other sampled waterbodies, the BMI ranking for the Tecolote Creek site for 11/1998 was around average, but was well below average for 05/1999. (SDRWQCB, 1999A).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected in Tecolote Creek, 5 riffles upstream of Gardena Av. and Cross St.
Temporal Representation: Sampling occurred in 11/1998 and 05/1999.

Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID	51641	Region 9
Tecolote Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of 12 samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 12 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51641, Chlorpyrifos	Region 9
Tecolote Creek	

LOE ID: 77940

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorpyrifos. Seven sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53292	Region 9
Tecolote Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 17</p>

samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 17 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53292, Chromium

Region 9

Tecolote Creek

LOE ID:	77036
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban

DECISION ID	51656	Region 9
Tecolote Creek		

Pollutant: Deltamethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of four samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51656, Deltamethrin	Region 9
Tecolote Creek	

LOE ID: 77055

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Deltamethrin.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 12/10/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	51659	Region 9
Tecolote Creek		
Pollutant:	Esfenvalerate/Fenvalerate	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of four samples exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Tecolote Creek

LOE ID:	77073
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 12/10/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

53293

Region 9

Tecolote Creek

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 17 samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 17 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53293, Nickel
Tecolote Creek**

Region 9

LOE ID:	77077
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban

DECISION ID	44332	Region 9
Tecolote Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects	Region 9
Tecolote Creek	

LOE ID:	7192
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	33
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirty three of thirty seven samples collected exceed the water quality objective according to

	results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 1994-2006 Urban Runoff Monitoring. Volume 1- Final Report
Data Reference:	
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on the east side of Morena Boulevard.
Temporal Representation:	Samples were collected two to four times a year from 1994-2006
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID:	3332
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 11/1997 to 03/2000. Seven of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Creek site SD5. The location of this site is unknown.
Temporal Representation:	Samples were collected from 11/1997 to 03/2000. Two to 3 samples were collected per year.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID: 3330

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Non-Contact Recreation

Number of Samples: 9
Number of Exceedances: 9

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego from 11/1997 to 03/2000. Nine of 9 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters-streams and other flowing waters with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected in Tecolote Creek at site SD5. The exact location of this site is unknown.

Temporal Representation: Samples were collected from 11/1997 to 03/2000. 2-3 samples were collected per year.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s): Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID: 79627

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 13
Number of Exceedances: 11

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Thirteen samples were taken from one station in Tecolote Creek. Eleven of the samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Two samples did not have scores calculated due to low organism

Data Reference:	counts. Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams. Region 9 CSCI Scores & Water Body Information
Spatial Representation:	The samples were collected at station TC-TCNP on Tecolote Creek.
Temporal Representation:	The samples were collected from 2001 to 2007
Environmental Conditions:	
QAPP Information:	Data collected following the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects
Tecolote Creek

Region 9

LOE ID:	77009
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Fifteen of the fifteen samples collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration

Objective/Criterion Reference:	or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 906TC-MLS and TC-TCNP on Tecolote Creek.
Temporal Representation:	The samples were collected in May and October 2001 to 2007 and in May 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID:	78173
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Tecolote Creek

LOE ID:	77076
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Tecolote Creek

LOE ID:	77091
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	6

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected to test for toxicity. Six of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 906TC-MLS Tecolote Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID:	77054
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)

Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 12/10/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID:	77057
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 5 of 19 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID:	77021
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 12/10/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects**Region 9****Tecolote Creek**

LOE ID:	27031
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	Benthic macroinvertebrate surveys

Data Used to Assess Water Quality:	Thirteen samples of IBI data were taken from May 2001 to May 2007 at one sampling site. Of the total number of samples, all thirteen of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: TC-TCNP on Tecolote River.
Temporal Representation:	Sampling occurred during May and October annually over a six year period from May 2001 to October 2006 and during May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID:	26470
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from November 1998 to May 2000 at one sampling site. Of the total number of samples, all four samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 906TCTCNP on Tecolote River.
Temporal Representation:	Sampling occurred during one to two events annually from November 1998 to May 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID:	7579
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three water samples were collected at Tecolote Creek station 906LPTEC3 on March, April, June, and September 2002. All three samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in March, April, June, and September 2002.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007). CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Tecolote Creek station 906LPTEC3; (Latitude 33.7768533, Longitude -117.18618).
Temporal Representation:	Samples were collected in March, April, and June 2002.
Environmental Conditions:	

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 44332, Benthic Community Effects

Region 9

Tecolote Creek

LOE ID: 3327

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Not Specified

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: Bioassessments were done by the San Diego Regional Water Quality Control Board in 1998 and 1999. Physical habitat scores and BMI ranking scores were given to each sampling site. Relative to other waterbodies in the study, the Tecolote Creek had medium to high physical habitat quality. Relative to the other sampled waterbodies, the BMI ranking for the Tecolote Creek site for 11/1998 was around average, but was well below average for 05/1999. (SDRWQCB, 1999A).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected in Tecolote Creek, 5 riffles upstream of Gardena Av. and Cross St.

Temporal Representation: Sampling occurred in 11/1998 and 05/1999.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID 53376

Region 9

Tecolote Creek

Pollutant: Bifenthrin

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four of the Four

samples exceed the Criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the Four samples exceed the Criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 53376, Bifenthrin
Tecolote Creek**

Region 9

LOE ID:	77021
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 12/10/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

DECISION ID	53377	Region 9
Tecolote Creek		

Pollutant: Cypermethrin
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the two samples exceed the Criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two samples exceed the Criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53377, Cypermethrin	Region 9
Tecolote Creek	

LOE ID: 77054

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Cypermethrin, total.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 12/10/2006-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53378	Region 9
Tecolote Creek		

Pollutant:	Diazinon
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Five of the 19 samples exceed the Criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Five of the 19 samples exceed the Criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53378, Diazinon

Region 9

Tecolote Creek

LOE ID:	77057
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek to determine beneficial use support and results are as follows: 5 of 19 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [Tecolote Creek - 906TC-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

43069

Region 9

Tecolote Creek

Pollutant:	Oil and Grease
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. This conclusion is based on the fact that the data shows 7 out of 9 samples had "detectable levels" of oil and grease. There is no numeric water quality objective to compare the data with, to determine if water quality objectives are being met or exceeded.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used does not satisfy the data quality requirements of section 6.1.4 of the Policy. The lack of an exact sampling location and actual data results make this LOEs insufficient information to determine beneficial use support and attainment of the Narrative Water Quality objective. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. This conclusion is based on the fact that the data shows 7 out of 9 samples had "detectable levels" of oil and grease and this information is insufficient to determine with the confidence and power required by the Listing Policy. There is no numeric water quality objective to compare the data with, to determine if water quality objectives are being met or exceeded. A minimum of five samples is needed for application of table 3.2 when there is a numeric water quality objective. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43069, Oil and Grease		Region 9
Tecolote Creek		
LOE ID:	3329	
Pollutant:	Oil and Grease	
LOE Subgroup:	Pollutant-Nuisance	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Non-Contact Recreation	
Number of Samples:	9	
Number of Exceedances:	7	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 11/1997 to 03/2000. Seven of 9 samples showed a measurable amount (0.5 mg/L or higher) of oil and grease (SWRCB, 2003).	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for oil and grease says, "Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses."	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Tecolote Creek site SD5. The exact location of this site was not reported.

Temporal Representation:

Samples were collected from 11/1997 to 03/2000. Two to 3 samples were collected per year.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID

33175

Region 9

Tecolote Creek

Pollutant:

Total Dissolved Solids

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:

Revision Status

Original

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the Nine samples exceed the Basin Plan objective for Total Dissolved Solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of Nine samples exceeded the Basin Plan Objective for Total Dissolved Solids and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33175, Total Dissolved Solids

Region 9

Tecolote Creek

LOE ID:

3331

Pollutant:

Total Dissolved Solids

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total Dissolved

Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected by the City of San Diego from 11/1997 to 03/2000. Four of 9 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Creek site SD5. The exact location of this site was not recorded.
Temporal Representation:	Samples were collected from 11/1997 to 03/2000. Two to 3 samples were collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	38349	Region 9
Tecolote Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 15 samples exceed the Basin Plan objective for pH.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 15 samples exceeded the Basin Plan Objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 38349, pH
Tecolote Creek**

Region 9

LOE ID:	3328
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 11/1997 to 03/2000. One of 15 samples, collected in the field and laboratory, was in exceedance. It was a field pH sample, reading 6.49 (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Creek site SD5. Location of this site was not reported.
Temporal Representation:	Samples were collected from 11/1997 to 03/05/2000. Samples were collected 2-3 times per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**DECISION ID 38167
Tecolote Creek**

Region 9

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Thirty three of the 40 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty three of 40 samples exceed the objective, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38167, Nitrogen

Region 9

Tecolote Creek

LOE ID:	7192
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	33
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirty three of thirty seven samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 1994-2006
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed on the east side of Morena Boulevard.
Temporal Representation:	Samples were collected two to four times a year from 1994-2006

Environmental Conditions: Samples were collected during wet weather.
QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38167, Nitrogen

Region 9

Tecolote Creek

LOE ID: 7379

Pollutant: Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: None of the three samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on June 5, March 14, and April 24, 2002.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected from the monitoring station Tecolote Creek 3 (station id: 906LPTEC3 lat/long: 32.77633/-117.18608), located on the main stem of Tecolote Creek.

Temporal Representation: Samples were collected on June 5, March 14, and April 24, 2002.

Environmental Conditions: The first sample was taken during declining base flow respectively. The last two were taken during wet weather, between storm events and wet weather, high base flow respectively.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA](#)

DECISION ID 43252

Region 9

Tecolote Creek

Pollutant: Phosphorus
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for removal from the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Nine of samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All nine samples exceeded the phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43252, Phosphorus

Region 9

Tecolote Creek

LOE ID:	3330
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 11/1997 to 03/2000. Nine of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected in Tecolote Creek at site SD5. The exact location of this site is unknown.

Temporal Representation:

Samples were collected from 11/1997 to 03/2000. 2-3 samples were collected per year.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	44909	Region 9
Tecolote Creek		

Pollutant:	Turbidity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Seven of nine of samples exceed the Basin Plan water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination to the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of nine of samples exceed the Basin Plan water quality objective for turbidity and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44909, Turbidity	Region 9
Tecolote Creek	

LOE ID:	3332
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 11/1997 to 03/2000. Seven of 9 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Creek site SD5. The location of this site is unknown.
Temporal Representation:	Samples were collected from 11/1997 to 03/2000. Two to 3 samples were collected per year.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego River \(Lower\)](#)
Water Body ID: CAR9071100020011025101606
Water Body Type: River & Stream

DECISION ID	34487	Region 9
San Diego River (Lower)		

Pollutant: Oxygen, Dissolved
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Forty-seven of the one hundred and eight samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-seven of one hundred and eight samples exceeded the OBJECTIVE and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34487, Oxygen, Dissolved	Region 9
San Diego River (Lower)	

LOE ID: 72807

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	108
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 108 averages of Dissolved Oxygen concentrations had 47 exceedences.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Old Mission Dam RSW-006 monitoring location and at Mission Ponds 9 miles downstream of discharge.
Temporal Representation:	Samples were collected once a month from January 2005 to May 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34487, Oxygen, Dissolved San Diego River (Lower)

Region 9

LOE ID:	4720
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

44931

Region 9

San Diego River (Lower)

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under section 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Fifteen of 20 samples exceeded the water quality objective for enterococcus of a single sample maximum of 61/100 ml for the protection of REC-1, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.4. The Bacterial TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria

Region 9

San Diego River (Lower)

LOE ID:	75568
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	162
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 162 samples exceeded the Total Coliform objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Total Coliform concentration shall not exceed more than 10000/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at San Diego River (Lower) at Sycamore Creek leaving Golf Course, Old Mission Dam and Mission Ponds. WBID: CAR9071100020011025101606
Temporal Representation:	Samples were collected between January 2006 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria
San Diego River (Lower)

Region 9

LOE ID:	75567
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [San Diego River, San Diego River, San Diego River, San Diego River, San Diego River]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria
San Diego River (Lower)

Region 9

LOE ID:	75615
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	162
Number of Exceedances:	14
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fourteen of the 162 samples exceeded the Fecal Coliform objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at San Diego River (Lower) at Sycamore Creek leaving Golf Course, Old Mission Dam and Mission Ponds. WBID: CAR9071100020011025101606
Temporal Representation:	Samples were collected between January 2006 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria
San Diego River (Lower)

Region 9

LOE ID:	75611
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [San Diego River, San Diego River, San Diego River, San Diego River, San Diego River]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria	Region 9
San Diego River (Lower)	

LOE ID:	75610
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [San Diego River, San Diego River, San Diego River, San Diego River, San Diego River]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria	Region 9
San Diego River (Lower)	

LOE ID:	75608
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	162
Number of Exceedances:	21
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-one of the 162 samples exceeded the E.Coli objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The E.Coli concentration shall not exceed more than 235/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at San Diego River (Lower) at Sycamore Creek leaving Golf Course, Old Mission Dam and Mission Ponds. WBID: CAR9071100020011025101606
Temporal Representation:	Samples were collected between January 2005 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria
San Diego River (Lower)

Region 9

LOE ID:	75607
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [San Diego River, San Diego River, San Diego River, San Diego River, San Diego River]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

**Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria
San Diego River (Lower)****Region 9**

LOE ID:	7488
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirteen of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed along a natural channel adjacent to the Fashion Valley Mall in San Diego.
Temporal Representation:	Samples were collected one to three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria
San Diego River (Lower)****Region 9**

LOE ID:	7487
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the criteria for enterococcus sets a maximum limit at 61 colonies per 100mL (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed along a natural channel adjacent to the Fashion Valley Mall in San Diego.
Temporal Representation:	Samples were collected one to three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 44931, Indicator Bacteria
San Diego River (Lower)**

Region 9

LOE ID:	4719
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 49144

Region 9

San Diego River (Lower)

Pollutant:	2-Methylnaphthalene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49144, 2-Methylnaphthalene
San Diego River (Lower)**

Region 9

LOE ID:	78262
Pollutant:	2-Methylnaphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites

Temporal Representation: [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
 Environmental Conditions: Data was collected on a single day 7/11/2008.
 QAPP Information: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information Reference(s): The Quality Assurance Project Plan from Southern California Bight was followed.
[Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	49145	Region 9
San Diego River (Lower)		

Pollutant: Antimony
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the nineteen water samples exceed the CRITERIA (and zero five sediment samples exceeded the guideline).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of nineteen water samples exceeded the CRITERIA (and zero of the five sediment samples exceeded the guideline) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49145, Antimony	Region 9
San Diego River (Lower)	

LOE ID: 78089
Pollutant: Antimony
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 19
Number of Exceedances: 1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for antimony is .006 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 49145, Antimony
San Diego River (Lower)**

Region 9

LOE ID:	78263
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]

Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	49146	Region 9
San Diego River (Lower)		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) list.

One lines of evidence are available in the administrative record to assess this pollutant. One of the nineteen water samples exceed the CRITERIA (for MUN). Zero of the five sediment samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of nineteen water samples exceeded the CRITERIA and zero of the five sediment samples exceeded the guideline, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 49146, Arsenic	Region 9
San Diego River (Lower)	

LOE ID:	78091
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49146, Arsenic
San Diego River (Lower)

Region 9

LOE ID:	78092
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49146, Arsenic
San Diego River (Lower)

Region 9

LOE ID:	78265
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 49148
San Diego River (Lower)

Region 9

Pollutant:	Benzo(a)anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49148, Benzo(a)anthracene
San Diego River (Lower)**

Region 9

LOE ID:	78266
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]

Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 49148, Benzo(a)anthracene
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**DECISION ID 49150
San Diego River (Lower)**

Region 9

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the GUIDELINE. One water sample was collected, but the detection limit is greater than the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49150, Bifenthrin
San Diego River (Lower)**

Region 9

LOE ID:	75581
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]

Temporal Representation:	Data was collected on a single day 11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49152	Region 9
San Diego River (Lower)		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the five samples exceed the CRITERIA. Two of five samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the five samples exceed the CRITERIA and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49152, Chlordane		Region 9
San Diego River (Lower)		

LOE ID:	78268
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 49152, Chlordane
San Diego River (Lower)

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	49153	Region 9
San Diego River (Lower)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the twelve samples exceed the CRITERIA for WARM, and zero of the nineteen samples exceeded the guideline for MUN.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of twelve samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49153, Chlorpyrifos	Region 9
San Diego River (Lower)	

LOE ID:	77813
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorpyrifos. Two sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49153, Chlorpyrifos
San Diego River (Lower)

Region 9

LOE ID:	78095
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49154	Region 9
San Diego River (Lower)		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) list.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seventeen water samples exceed the CRITERIA, and zero of the five sediment samples exceeded the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of seventeen water samples and zero of five sediment samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49154, Chromium	Region 9
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San Diego River (Lower)

LOE ID:	75594
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49154, Chromium

Region 9

San Diego River (Lower)

LOE ID:	78269
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial

Data Reference:	use support and results are as follows: 0 of 5 samples exceed the criterion for Chromium. Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	49155	Region 9
San Diego River (Lower)		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the CRITERIA. Two of five samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the CRITERIA and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49155, Chrysene (C1-C4)	Region 9
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San Diego River (Lower)

LOE ID:	78270
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 49155, Chrysene (C1-C4)**Region 9****San Diego River (Lower)**

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	49156	Region 9
San Diego River (Lower)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) list.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the seventeen water samples and zero of the five sediment samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seventeen samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 49156, Copper	Region 9
San Diego River (Lower)	

LOE ID:	78096
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Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49156, Copper
San Diego River (Lower)

Region 9

LOE ID:	75596
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49156, Copper

Region 9

San Diego River (Lower)

LOE ID:	78271
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19. (1): 81-97
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 49156, Copper

Region 9

San Diego River (Lower)

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID 49157

Region 9

San Diego River (Lower)

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the GUIDELINE. One water sample was collected, but the detection limit was greater than the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>
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303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49157, Cypermethrin
San Diego River (Lower)**

Region 9

LOE ID:	75597
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected on a single day 11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

DECISION ID	49158	Region 9
San Diego River (Lower)		

Pollutant: Deltamethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49158, Deltamethrin	Region 9
San Diego River (Lower)	

LOE ID: 75598

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected on a single day 11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49392	Region 9
San Diego River (Lower)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #75599, and 0 of 9 samples exceed the Criteria</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment of LOE #75599, and 0 of 9 samples exceed the Criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49392, Diazinon
San Diego River (Lower)

Region 9

LOE ID:	75603
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water lifetime health advisory for diazinon is 1 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49392, Diazinon
San Diego River (Lower)

Region 9

LOE ID:	75599
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 02/11/2005 -11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49455	Region 9
San Diego River (Lower)		

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the CRITERIA. Two of five samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the CRITERIA and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49455, Dibenz[a,h]anthracene

Region 9

San Diego River (Lower)

LOE ID:	78272
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Dibenzo(a, h)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 49455, Dibenz[a,h]anthracene

Region 9

San Diego River (Lower)

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	49458	Region 9
San Diego River (Lower)		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49458, Endrin
San Diego River (Lower)**

Region 9

LOE ID:	78273
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: a total of 5 samples were collected and they were all non-detect, however 1 sample was not used in analysis because when the method detection limit was organic carbon normalized, the result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 49458, Endrin
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	49466	Region 9
San Diego River (Lower)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49466, Esfenvalerate/Fenvalerate
San Diego River (Lower)**

Region 9

LOE ID:	75609
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected on a single day 11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID 49469
San Diego River (Lower)**

Region 9

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seventeen water samples exceed the CRITERIA. Zero of the 5 sediment samples exceed the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seventeen water samples exceeded the CRITERIA, zero of the five sediment samples exceed the guideline, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49469, Lead
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.

Temporal Representation: The samples were collected in July 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

**Line of Evidence (LOE) for Decision ID 49469, Lead
San Diego River (Lower)**

Region 9

LOE ID: 75616

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Lead.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]

Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

**Line of Evidence (LOE) for Decision ID 49469, Lead
San Diego River (Lower)**

Region 9

LOE ID:	78274
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	49470	Region 9
San Diego River (Lower)		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49470, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Diego River (Lower)

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 49470, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

San Diego River (Lower)

LOE ID:	78275
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	49472	Region 9
San Diego River (Lower)		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the sixteen samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of sixteen samples exceeded the GUIDELINE and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49472, Malathion
San Diego River (Lower)**

Region 9

LOE ID:	75621
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49472, Malathion

Region 9

San Diego River (Lower)

LOE ID:	75620
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water lifetime health advisory for malathion is 500 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/8/2002-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49473	Region 9
San Diego River (Lower)		
Pollutant:	Mercury	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five	

samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49473, Mercury
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

**Line of Evidence (LOE) for Decision ID 49473, Mercury
San Diego River (Lower)****Region 9**

LOE ID:	78276
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Mercury.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	49474	Region 9
San Diego River (Lower)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the nineteen samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of nineteen samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49474, Nickel

Region 9

San Diego River (Lower)

LOE ID:	75626
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49474, Nickel

Region 9

San Diego River (Lower)

LOE ID:	78097
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49475	Region 9
San Diego River (Lower)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the nineteen samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of nineteen samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49475, Nitrate/Nitrite (Nitrite + Nitrate as N)
San Diego River (Lower)**

Region 9

LOE ID:	78098
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 49476
San Diego River (Lower)

Region 9

Pollutant: Nitrogen, Nitrite

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the nineteen samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of nineteen samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49476, Nitrogen, Nitrite
San Diego River (Lower)**

Region 9

LOE ID: 78099

Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrite as N.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site

Temporal Representation: [San Diego River - 907SDR-MLS]
 Environmental Conditions: Data was collected over the time period 11/29/2001-11/4/2008.
 QAPP Information: Staff is not aware of any special conditions that might affect interpretation of the data.
 The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
 QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	49477	Region 9
San Diego River (Lower)		

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINES. Two of five samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49477, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
San Diego River (Lower)	

LOE ID: 78277
Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 49477, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

San Diego River (Lower)

LOE ID:	78278
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, Low molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters.

Spatial Representation: Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]

Temporal Representation: Data was collected on a single day 7/11/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

Line of Evidence (LOE) for Decision ID 49477, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

San Diego River (Lower)

LOE ID: 75571

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Estuarine Habitat

Number of Samples: 5

Number of Exceedances: 2

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of *Eohaustorius estuarius* and percent normal of *Mytilus galloprovincialis*.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.

Temporal Representation: The samples were collected in July 2008.

Environmental Conditions:

QAPP Information: This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 49477, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

San Diego River (Lower)

LOE ID: 78279

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAHs (Polycyclic Aromatic Hydrocarbons).
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	49478	Region 9
San Diego River (Lower)		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49478, PCBs (Polychlorinated biphenyls)

Region 9

San Diego River (Lower)

LOE ID:	78280
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PCB, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 49478, PCBs (Polychlorinated biphenyls)

Region 9

San Diego River (Lower)

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	51359	Region 9
San Diego River (Lower)		
Pollutant:	Phenanthrene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available 	

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51359, Phenanthrene
San Diego River (Lower)**

Region 9

LOE ID:	78281
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 51359, Phenanthrene
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	51363	Region 9
San Diego River (Lower)		
Pollutant:	Pyrene	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available 	

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51363, Pyrene
San Diego River (Lower)**

Region 9

LOE ID:	78282
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**Line of Evidence (LOE) for Decision ID 51363, Pyrene
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5

Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius and percent normal of Mytilus galloprovincialis.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	51364	Region 9
San Diego River (Lower)		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the nineteen samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of nineteen samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51364, Selenium
San Diego River (Lower)

Region 9

LOE ID:	78101
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 51364, Selenium
San Diego River (Lower)

Region 9

LOE ID:	78100
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for selenium is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	51366	Region 9
San Diego River (Lower)		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the GUIDELINE. Two of five samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51366, Silver
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 51366, Silver
San Diego River (Lower)**

Region 9

LOE ID:	78261
Pollutant:	Silver
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	51367	Region 9
San Diego River (Lower)		

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. One of 19 samples exceed the secondary MCL for MBAS in water.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 19 samples exceed the secondary MCL for MBAS in water and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51367, Surfactants (MBAS)	Region 9
San Diego River (Lower)	

LOE ID: 78088

Pollutant: Surfactants (MBAS)
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 19
 Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for MBAS.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Secondary California Maximum Contaminant Level for MBAS is 0.5 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]

Temporal Representation: Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	51374	Region 9
San Diego River (Lower)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) list.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seventeen water samples and zero of the five sediment samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>	

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seventeen water samples and zero of the five sediment samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 51374, Zinc
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 51374, Zinc
San Diego River (Lower)**

Region 9

LOE ID:	78264
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 51374, Zinc San Diego River (Lower)

Region 9

LOE ID:	78090
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

Objective/Criterion Reference:	life (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations). Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 51374, Zinc
San Diego River (Lower)**

Region 9

LOE ID:	75574
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49479	Region 9
San Diego River (Lower)		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one hundred seven samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one hundred seven samples exceeded the OBJECTIVE and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.</p>

Line of Evidence (LOE) for Decision ID 49479, pH	Region 9
San Diego River (Lower)	

LOE ID:	75643
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 107 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected from the Old Mission Dam RSW-006 monitoring location and at Mission Ponds 9 miles downstream of discharge.

Temporal Representation:

Samples were collected once a month from January 2005 to May 2009.

Environmental Conditions:

QAPP Information:

No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.

QAPP Information Reference(s):

DECISION ID	51732	Region 9
San Diego River (Lower)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects	Region 9
San Diego River (Lower)	

LOE ID:	25293
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Two of fifteen samples were found to be toxic as determined by at least one of the following tests: Selenastrum Capicornutum growth test, Ceriodaphnia dubia survival/reproductive test, and Hyalella Azteca growth/survival test according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed along a natural channel adjacent to the Fashion Valley Mall in San Diego. Samples were collected one to four times a year from 2001-2006.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to SWAMP guidelines.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

**Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects
San Diego River (Lower)**

Region 9

LOE ID:	78093
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average)

to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]

Temporal Representation:

Data was collected over the time period 11/29/2001-11/4/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects

Region 9

San Diego River (Lower)

LOE ID:

79666

Pollutant:

Benthic-Macroinvertebrate Bioassessments

LOE Subgroup:

Population/Community Degradation

Matrix:

Water

Fraction:

None

Beneficial Use:

Warm Freshwater Habitat

Number of Samples:

23

Number of Exceedances:

15

Data and Information Type:

Benthic macroinvertebrate surveys

Data Used to Assess Water Quality:

Twenty-three samples were taken at three stations in the lower San Diego River. Fifteen samples were below the 0.79 threshold, therefore exceeding the water quality objective for the aquatic life beneficial use. Two samples did not have calculated scores due to low organism counts.

Data Reference:

[RWB9 Status Sampling 2007 and 2008](#)
[Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)
[Region 9 CSCI Scores & Water Body Information](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to

Guideline Reference:	have exceeded the water quality objective for the aquatic life beneficial use. The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations 907SDR-MT 907SSDR11 907SDR-1
Temporal Representation:	The samples were collected twice a year in May and October from 2002 to 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project and the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008 Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects
San Diego River (Lower)

Region 9

LOE ID:	72765
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	25
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty-five of the 25 samples collected had IBI scores below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at stations SDR-1, SDR-MLS, SDR-MT, SDR-TWAS-1, and SDR-TWAS-2 San Diego River.
Temporal Representation:	The samples were collected twice a year in May and October from 2002 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects**Region 9****San Diego River (Lower)**

LOE ID:	75599
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 02/11/2005 -11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects**Region 9****San Diego River (Lower)**

LOE ID:	75580
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected at station SDR-TWAS-3, San Diego River.
Temporal Representation:	The sample was collected in May 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects
San Diego River (Lower)

Region 9

LOE ID:	75573
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The sample collected had an IBI score below 40. The score was 14.3. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are

converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference:

Spatial Representation:

The samples was collected at 907_SMC04054, San Diego River.

Temporal Representation:

The samples were collected in May 2009.

Environmental Conditions:

QAPP Information:

The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects

Region 9

San Diego River (Lower)

LOE ID: 75572

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: The IBI score for this water body was 6 which indicates that this water body may be considered to have impaired conditions.

Data Reference: [RWB9 Status Sampling 2007 and 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation:

Samples were collected at the following station: 907SSDR11 (San Diego River 11).

Temporal Representation:

Surveys done May 5, 2008.

Environmental Conditions:

QAPP Information:

Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects

Region 9

San Diego River (Lower)

LOE ID: 75570

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected to test for toxicity. Three of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDR-MLS San Diego River.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects
San Diego River (Lower)**

Region 9

LOE ID:	7491
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected and three samples show significant toxicity levels (SL) as determined by at least one of the following tests: <i>Selenastrum Capicornutum</i> growth test, and <i>Ceriodaphnia dubia</i> survival/reproductive test according to the Surface Water Ambient Monitoring Program, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Waters are considered toxic when samples show significant toxicity levels (SWAMP code Â‘SLÂ’) when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at San Diego River 15.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according Surface Ambient Monitoring Program procedures.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects

Region 9

San Diego River (Lower)

LOE ID:	7490
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the four samples exceeds water quality objectives according to results in the Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected on four dates. May 18 and September 13, 2004 and February 28 and April 19, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)</p> <p>A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring station San Diego River 15 (station id: 907SSDR15 lat/long: 32.76194/-117.1927), located on the main stem of the San Diego River.
Temporal Representation:	Samples were collected on four dates. May 18 and September 13, 2004, February 28 and April 19, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third sample occurred between storm events and the fourth during high

base flow.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 51732, Benthic Community Effects
San Diego River (Lower)

Region 9

LOE ID: 7489

Pollutant: Total Nitrogen as N
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 15
 Number of Exceedances: 14

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
 Data Used to Assess Water Quality: Fourteen of fifteen samples collected exceeded the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2001-2006.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
 A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed along a natural channel adjacent to the Fashion Valley Mall in San Diego.

Temporal Representation: Samples were collected one to three times a year from 2001-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

DECISION ID 49151
San Diego River (Lower)

Region 9

Pollutant: Cadmium
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the nineteen water samples exceed the CRITERIA, and zero of the five sediment samples exceed the GUIDELINE..

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of nineteen water samples exceed the CRITERIA and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49151, Cadmium San Diego River (Lower)

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 49151, Cadmium
San Diego River (Lower)**

Region 9

LOE ID:	78094
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 49151, Cadmium
San Diego River (Lower)**

Region 9

LOE ID:	78093
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Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Lower) to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 1 monitoring site [San Diego River - 907SDR-MLS]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49151, Cadmium
San Diego River (Lower)

Region 9

LOE ID:	78267
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for San Diego River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for San Diego River (Lower) was collected at 5 monitoring sites [907_6181, 907_6189, 907_6192, 907_6197, 907_6200]
Temporal Representation:	Data was collected on a single day 7/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	43059	Region 9
San Diego River (Lower)		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Fifteen of the nineteen samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of nineteen samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 43059, Nitrogen	Region 9
San Diego River (Lower)	

LOE ID:	7490
Pollutant:	Total Nitrogen as N

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the four samples exceeds water quality objectives according to results in the Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected on four dates. May 18 and September 13, 2004 and February 28 and April 19, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring station San Diego River 15 (station id: 907SSDR15 lat/long: 32.76194/-117.1927), located on the main stem of the San Diego River.
Temporal Representation:	Samples were collected on four dates. May 18 and September 13, 2004, February 28 and April 19, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third sample occurred between storm events and the fourth during high base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43059, Nitrogen
San Diego River (Lower)

Region 9

LOE ID:	7489
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	14

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Fourteen of fifteen samples collected exceeded the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed along a natural channel adjacent to the Fashion Valley Mall in San Diego.
Temporal Representation:	Samples were collected one to three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	51375	Region 9
San Diego River (Lower)		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Six of 23 water samples and two of the five sediment samples exceed the GUIDELINES. In the portion of San Diego River Estuary, two of five sediment samples also showed toxicity to aquatic life.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 23 water samples and two of the five sediment samples exceed the GUIDELINES. In the
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portion of San Diego River Estuary, two of five sediment samples also showed toxicity to aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 51375, Toxicity
San Diego River (Lower)**

Region 9

LOE ID:	75571
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to test for toxicity. Two of the samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> and percent normal of <i>Mytilus galloprovincialis</i> .
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from sites 907_6181, 907_6189, 907_6192, 907_6197, 907_6200 San Diego River.
Temporal Representation:	The samples were collected in July 2008.
Environmental Conditions:	
QAPP Information:	This data was collected under the Southern California Bight 2008 Regional Marine Monitoring Survey Quality Assurance Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 51375, Toxicity
San Diego River (Lower)**

Region 9

LOE ID:	75570
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected to test for toxicity. Three of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDR-MLS San Diego River.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 51375, Toxicity
San Diego River (Lower)**

Region 9

LOE ID:	95659
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. one of the two samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival and growth of <i>Hyalella Azteca</i> ..
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. The paired t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

[Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001](#)

Spatial Representation:

The samples were collected at station 907SSDR15 on San Diego River.

Temporal Representation:

The samples were collected from on May 18 and September 13 of 2004.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 51375, Toxicity

Region 9

San Diego River (Lower)

LOE ID: 7491

Pollutant: Toxicity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: Ambient toxicity testing (chronic)
Data Used to Assess Water Quality: Four samples were collected and three samples show significant toxicity levels (SL) as determined by at least one of the following tests: Selenastrum Capicornutum growth test, and Ceriodaphnia dubia survival/reproductive test according to the Surface Water Ambient Monitoring Program, 2007. Samples were collected one to four times a year from 2001-2006.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Waters are considered toxic when samples show significant toxicity levels (SWAMP code Â'SLÂ') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Monitoring data for Region 9](#)

Spatial Representation: Samples were collected at San Diego River 15.
Temporal Representation: Samples were collected one to four times a year from 2001-2006.
Environmental Conditions: Samples were collected during wet weather.
QAPP Information: QA/QC conducted according Surface Ambient Monitoring Program procedures.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID 44492

Region 9

San Diego River (Lower)

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 one line(s) of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. All three of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three samples exceeded the manganese water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

The Regional Board staff mistakenly assessed manganese as a conventional pollutant and applied table 3.2 of the listing Policy. Manganese is a toxicant and should be assessed using Table 3.1. State Water Board staff has corrected this error and revised the recommendation to List for manganese as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the three samples exceed the water quality objective for manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of three samples exceeded the water quality objective for manganese and this exceeds the allowable frequency under Section 3.1 of the Listing Policy.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met..

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44492, Manganese
San Diego River (Lower)**

Region 9

LOE ID:	30914
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Five water samples were collected at San Diego River station 907SSDR15 on March, April, June and September 2002, all showed excessive manganese concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Inland surface waters shall not contain manganese in excess of the numerical values described in table 3-2. The secondary drinking water standard for manganese is 0.05 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Diego River station 907SSDR15; (Latitude 32.7621, Longitude -117.1925).
Temporal Representation:	Data was collected during the months of May and Sept. 2004, and April and Feb. 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

34467

Region 9

San Diego River (Lower)

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards</p>

will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34467, Phosphorus
San Diego River (Lower)**

Region 9

LOE ID:	4721
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

**DECISION ID 43058
San Diego River (Lower)**

Region 9

Pollutant:	Total Dissolved Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards

will update this decision when new data and information become available and are assessed.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43058, Total Dissolved Solids
San Diego River (Lower)**

Region 9

LOE ID:	4722
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Alvarado Creek](#)
Water Body ID: CAR9071100020011025125514
Water Body Type: River & Stream

DECISION ID	42850	Region 9
Alvarado Creek		

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Two of the four samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of four samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42850, Nitrogen	Region 9
Alvarado Creek	

LOE ID: 8899
Pollutant: Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Alvarado Creek station 907SDALV3 on May 2004, September 2004, February and April 2005. Two of four samples showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program, 2007. Samples were collected in May 2004, September 2004, February 2005, and April 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Alvarado Creek station 907SDALV3.
Temporal Representation:	Samples were collected in May 2004, September 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

DECISION ID	44402	Region 9
Alvarado Creek		
Pollutant:	Benthic Community Effects	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed. Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this indicator. 2 of 2 samples exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section</p>	

303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 2 of 2 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

The decision has not changed. Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44402, Benthic Community Effects

Region 9

Alvarado Creek

LOE ID:	26349
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken in June 2004 and June 2006 at two sampling sites. Both samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 907ALV204 and 907SDALV3 on Alvarado Creek.
Temporal Representation:	Sampling occurred during one event on June 2004 and another event on June 2006.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the

QAPP Information Reference(s):

[State of California, California Monitoring and Assessment Program: "CMAP".](#)
[Quality Assurance Project Plan for the California Stream Bioassessment Procedure](#)
[The San Diego Stream Team Quality Assurance Project Plan](#)

DECISION ID	43846	Region 9
Alvarado Creek		

Pollutant: Selenium
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the CTR water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the four samples exceed the CTR water quality objective for selenium and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43846, Selenium	Region 9
Alvarado Creek	

LOE ID: 8925

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4

Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Alvarado Creek station 907SDALV3 on May 2004, September 2004, April 2005, and February 2005. All four samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Alvarado Creek station 907SDALV3.
Temporal Representation:	Samples were collected on May 2004, September 2004, April 2005, and February 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sycamore Canyon](#)
Water Body ID: CAR9071200020011005135819
Water Body Type: River & Stream

DECISION ID	48189	Region 9
Sycamore Canyon		

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Two of the eight samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of eight samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48189, pH	Region 9
Sycamore Canyon	

LOE ID: 76974
Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 8

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of the 8 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the RSW-001 and RSW-001a stations.
Temporal Representation:	Samples were collected once a month from January 2005 to December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

DECISION ID	48183	Region 9
Sycamore Canyon		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twenty of the sixty samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of sixty samples exceed the objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48183, Oxygen, Dissolved	Region 9
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Sycamore Canyon

LOE ID:	72817
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 60 averages of Dissolved Oxygen concentrations had 20 exceedences.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the RSW-001 and RSW-001a stations.
Temporal Representation:	Samples were collected once a month from January 2005 to December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

DECISION ID	33627	Region 9
Sycamore Canyon		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of two samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Basin Plan water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33627, Chloride
Sycamore Canyon**

Region 9

LOE ID:	3335
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 2000. None of the 2 samples were in exceedance (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters in the 907.10 HA and all beneficial uses, the WQO for Chloride is 400 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sycamore Canyon Creek site SYC2.
Temporal Representation:	Samples were collected on 03/06/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Forester Creek](#)
Water Body ID: CAR9071300020010924120240
Water Body Type: River & Stream

DECISION ID	46216	Region 9
Forester Creek		

Pollutant: Oxygen, Dissolved
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Eight of the seventy samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of seventy samples exceeded the OBJECTIVE and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46216, Oxygen, Dissolved	Region 9
Forester Creek	

LOE ID: 3342

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Industrial Service Supply

Number of Samples: 10
Number of Exceedances: 3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected at Forester Creek by the City of El Cajon in 09/1997 and monthly from 04/2000-12/2000. Three of 10 averages were below 7.0 mg/L, which is more than 10% of the time (SWRCB, 2003)
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek. The exact sample location is unknown.
Temporal Representation:	Samples were collected in 09/1997 and monthly from 04/2000-12/2000. Averages were reported. It is unknown how many samples were collected per month.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46216, Oxygen, Dissolved Forester Creek

Region 9

LOE ID:	72806
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 60 averages of Dissolved Oxygen concentrations had 5 exceedences.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the RSW-004 station.
Temporal Representation:	Samples were collected once a month from January 2005 to December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Pollutant:	pH
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; due to change in WQS
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Two of the fifty-nine samples exceeded the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of fifty-nine samples exceeded the OBJECTIVE and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 32669, pH	Region 9
Forester Creek	

LOE ID:	3340
Pollutant:	pH (high)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Industrial Service Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon from 09/1994 to 01/2001. Twelve of 12 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Forester Creek Channel at North City Limit.
Age of oldest data assessed is almost 10 years at time of assessment. Samples were collected from 09/27/1994 to 01/03/2001. Two samples per month were collected in 09/1994, 05/1996, 11/1997, 01/1999, and 01/2001. One sample per month was also collected in 06/1999 and 07/2000.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 32669, pH

Region 9

Forester Creek

LOE ID: 3338

Pollutant: pH (high)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Industrial Service Supply

Number of Samples: 14
Number of Exceedances: 14

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of El Cajon from 09/1994 to 01/2001. Fourteen of 14 samples were in exceedance.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected in Forester Creek, North of I-8 between Magnolia and Johnson. Oldest data used is almost 10 years old at time of assessment. Samples were collected from 09/27/1994 to 01/03/2001. Two samples each were collected in 09/1994, 05/1996, 11/1997, 01/1999, 06/1999, and 01/2001. One sample each was collected in 12/1999, and 07/2000.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

Line of Evidence (LOE) for Decision ID 32669, pH

Region 9

Forester Creek

LOE ID: 3336

Pollutant: pH (high)
LOE Subgroup: Ancillary Evidence Spills
Matrix: Not Specified
Fraction: None

Beneficial Use:	Industrial Service Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A letter from the City of El Cajon, by Richard C. Odiorne, City Engineer, was written to Julian Medina at Chem-tronics, Inc, in El Cajon, CA. The letter is dated July 6, 2000 and documents a 1000 gallons sodium hydroxide spill from Chem-tronic, Inc, that occurred on July 5, 2000. The letter from Richard Odiorne (City of El Cajon) asks that Chem-tronics, inc. ensure that they have Best Management Practices in place for spill preventions and cleanup.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: The pH value shall not be changed at any time more than 0.2 pH units from that which occurs naturally. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR), or estuarine (EST), or saline (SAL) beneficial uses. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated cold freshwater habitat (COLD) or warm freshwater habitat (WARM) beneficial uses. In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0. In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	The corresponding numeric objective for pH from the Basin Plan for inland surface waters with all beneficial uses is 6.5 (minimum) to 8.5 (maximum).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	A sodium hydroxide spill occurred in the Forester Creek Channel from Chem-tronics, Inc. 1150 West Bradley Av., El Cajon, CA 92020.
Temporal Representation:	The spill occurred on July 5, 2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32669, pH

Region 9

Forester Creek

LOE ID:	3337
Pollutant:	pH (high)
LOE Subgroup:	Ancillary Evidence Spills
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Industrial Service Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A County of San Diego Department of Environmental Health referral form indicates that 10-20 gallons of an acid/water/copper mixture (pH of 2-3) spilled into Forester Creek on 05/01/2001. The spill was reported to the County of San Diego DEH by Randy Olms (employee at Chem-tronics). The complaint was referred to the City of El Cajon. It is reported that an emergency response team was on scene to conduct the clean up. County of San Diego DEH referral says that an emergency response team was on the scene to conduct a cleanup of the spill.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be changed at any time more than 0.2 pH units from that which occurs naturally. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR), or estuarine (EST), or saline (SAL) beneficial uses. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated cold freshwater habitat (COLD) or warm freshwater habitat (WARM) beneficial uses. In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0. In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	The corresponding numeric objective for pH from the Basin Plan for inland surface waters with all beneficial uses is 6.5 (minimum) to 8.5 (maximum).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	The spill occurred from 1150 W. Bradley Av., El Cajon, CA 92020 (Chem-tronics, Inc.).
Temporal Representation:	The spill occurred on 05/01/2001.
Environmental Conditions:	It was noted in the referral form that the acid spilled into a dry bed.
QAPP Information:	Data used in 2002 assessment. QA=?
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32669, pH

Region 9

Forester Creek

LOE ID:	3339
Pollutant:	pH (high)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Industrial Service Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon from 09/1994 to 01/2001. Twelve of 12 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek North of Vernon Way between Johnson and Marshall.
Temporal Representation:	Oldest data used is just under 10 years old at time of assessment. Samples were collected from 09/27/1994 to 01/03/2001. Two samples were collected per month in 09/1994, 05/1996, 11/1997, 01/1999, and 01/2001. One sample was collected per month in 06/1999 and 07/2000.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32669, pH

Region 9

Forester Creek

LOE ID:	73744
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 59 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the RSW-004 monitoring station.
Temporal Representation:	Samples were collected once a month from January 2005 to December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 32669, pH
Forester Creek**

Region 9

LOE ID:	3341
Pollutant:	pH (high)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Industrial Service Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon in 09/1997 and 04/2000-12/2000. Only monthly averages were reported. None of the 10 averages were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Forester Creek. Location of sampling is unknown.
Temporal Representation:	Samples were collected in 09/1997 and 04/2000-12/2000. Monthly averages are reported. It is unknown how many samples were collected per month.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	34007	Region 9
Forester Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under section 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 66 of 120, 53 of 118, and 23 of 119 single samples exceed the water quality objectives for E. Coli., fecal coliform, and total coliform of 61/100ml, 400/100ml, and 10000/100 ml, respectively, for the protection of REC-1, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34007, Indicator Bacteria	Region 9
Forester Creek	

LOE ID:	73745
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 34007, Indicator Bacteria
Forester Creek

Region 9

LOE ID:	73746
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	118
Number of Exceedances:	23
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-three of the 118 samples exceeded the Total Coliform objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Total Coliform concentration shall not exceed more than 10000/100 ml. USEPA

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at the Forrester Creek station and the Mast Boulevard station. WBID: CAR9071300020010924120240
Temporal Representation:	Samples were collected between January 2005 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34007, Indicator Bacteria
Forester Creek

Region 9

LOE ID:	73719
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	San Diego Water Board Basin Plan (2010) states that enterococcus concentration shall not exceed a single sample maximum of 61/100 ml in fresh water.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 34007, Indicator Bacteria
Forester Creek

Region 9

LOE ID:	4452
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34007, Indicator Bacteria Forester Creek

Region 9

LOE ID:	73726
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 34007, Indicator Bacteria

Region 9

Forester Creek

LOE ID:	73727
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	53
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-three of the 117 samples exceeded the Fecal Coliform objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at the Forrester Creek station and the Mast Boulevard station. WBID: CAR9071300020010924120240
Temporal Representation:	Samples were collected between January 2005 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34007, Indicator Bacteria

Region 9

Forester Creek

LOE ID:	73725
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	120
Number of Exceedances:	66
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	sixty-six of the 120 samples exceeded the E.Coli objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The E.Coli concentration shall not exceed more than 235/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at the Forrester Creek station. WBID: CAR9071300020010924120240
Temporal Representation:	Samples were collected between January 2005 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

DECISION ID	48358	Region 9
Forester Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two water and zero of the one sediment sample(s) exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two water and zero of one sediment sample(s) exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48358, Arsenic	Region 9
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Forester Creek

LOE ID:	73676
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48358, Arsenic**Region 9****Forester Creek**

LOE ID:	73677
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48358, Arsenic
Forester Creek

Region 9

LOE ID:	73678
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48358, Arsenic
Forester Creek

Region 9

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48358, Arsenic
Forester Creek**

Region 9

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	48383	Region 9
Forester Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the one water sample and zero of the one sediment sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one water sample and zero of one sediment sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 48383, Bifenthrin**Region 9****Forester Creek**

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48383, Bifenthrin**Region 9****Forester Creek**

LOE ID:	73682
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48383, Bifenthrin

Region 9

Forester Creek

LOE ID:	78024
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]

Temporal Representation: Data was collected over the time period 5/26/2009-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 48383, Bifenthrin

Region 9

Forester Creek

LOE ID: 73749

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation: The samples were collected at station 907SDFRC2.

Temporal Representation: The samples were collected in May 2008.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

DECISION ID 48384

Region 9

Forester Creek

Pollutant: Cadmium

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three water samples and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three water samples and zero of one sediment sample exceeded the CRITERIA/GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48384, Cadmium
Forester Creek

Region 9

LOE ID: 73748

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48384, Cadmium

Region 9

Forester Creek

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48384, Cadmium**Region 9****Forester Creek**

LOE ID:	73684
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 48384, Cadmium**Region 9****Forester Creek**

LOE ID:	73685
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48384, Cadmium

Region 9

Forester Creek

LOE ID:	73686
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

Line of Evidence (LOE) for Decision ID 48384, Cadmium**Region 9****Forester Creek**

LOE ID:	73687
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48384, Cadmium**Region 9****Forester Creek**

LOE ID:	73688
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for

Data Reference: Cadmium.
[Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]

Temporal Representation: Data was collected over the time period 5/26/2009-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	48385	Region 9
Forester Creek		

Pollutant: Chlordane (sediment)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48385, Chlordane (sediment)	Region 9
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Forester Creek

LOE ID:	72831
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 907SDFRC2 (Forrester Creek 2).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48385, Chlordane (sediment)**Region 9****Forester Creek**

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID	48386	Region 9
Forester Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERION (water) and GUIDELINE (sediment).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the GUIDELINE (sediment) CRITERIA (water) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48386, Chlorpyrifos	Region 9
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Forester Creek

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48386, Chlorpyrifos**Region 9****Forester Creek**

LOE ID:	78025
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for

Data Reference:	Chlorpyrifos. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48386, Chlorpyrifos

Region 9

Forester Creek

LOE ID:	73690
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Line of Evidence (LOE) for Decision ID 48386, Chlorpyrifos

Region 9

Forester Creek

LOE ID:	73691
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48387

Region 9

Forester Creek

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and

3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two water samples exceed the CRITERIA and zero of the one sediment sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two water and zero of one sediment sample(s) exceeded the CRITERIA/GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48387, Chromium

Region 9

Forester Creek

LOE ID: 73749

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyaella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both

Guideline Reference:	criteria are met).
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48387, Chromium	Region 9
Forester Creek	

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48387, Chromium	Region 9
Forester Creek	

LOE ID:	73693
Pollutant:	Chromium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48387, Chromium

Region 9

Forester Creek

LOE ID:	73692
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48388	Region 9
Forester Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three water samples exceed the CRITERIA and zero of the one sediment sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three water samples and zero of one sediment sample exceeded the CRITERIA/GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48388, Copper	Region 9
Forester Creek	

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 48388, Copper
Forester Creek**

Region 9

LOE ID:	73694
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48388, Copper

Region 9

Forester Creek

LOE ID:	73704
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan

QAPP Information Reference(s): was followed.
[Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 48388, Copper **Region 9**
Forester Creek

LOE ID: 73697

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]

Temporal Representation: Data was collected over the time period 5/26/2009-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 48388, Copper **Region 9**
Forester Creek

LOE ID: 73696

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48388, Copper

Region 9

Forester Creek

LOE ID:	73695
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

Line of Evidence (LOE) for Decision ID 48388, Copper**Region 9****Forester Creek**

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyaella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID**48390****Region 9****Forester Creek**

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48390, Cyfluthrin

Region 9

Forester Creek

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	

Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48390, Cyfluthrin

Region 9

Forester Creek

LOE ID:	77752
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48391

Region 9

Forester Creek

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE. Zero of one sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48391, Cyhalothrin, Lambda
Forester Creek****Region 9**

LOE ID: 73749

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyaella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are

counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation:

The samples were collected at station 907SDFRC2.

Temporal Representation:

The samples were collected in May 2008.

Environmental Conditions:

QAPP Information:

All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 48391, Cyhalothrin, Lambda
Forester Creek**

Region 9

LOE ID: 77753

Pollutant: Cyhalothrin, Lambda
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).

Guideline Reference: [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

**DECISION ID 48392
Forester Creek**

Region 9

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the one water samples exceed the GUIDELINE and zero of the one sediment sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one water and zero of one sediment sample(s) exceeded the GUIDELINES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48392, Cypermethrin Forester Creek

Region 9

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48392, Cypermethrin Forester Creek

Region 9

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

Line of Evidence (LOE) for Decision ID 48392, Cypermethrin**Region 9****Forester Creek**

LOE ID:	78026
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48392, Cypermethrin**Region 9****Forester Creek**

LOE ID:	77754
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48393	Region 9
Forester Creek		

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48393, DDD (Dichlorodiphenyldichloroethane)
Forester Creek

Region 9

LOE ID:	73710
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48393, DDD (Dichlorodiphenyldichloroethane)
Forester Creek

Region 9

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID	48394	Region 9
Forester Creek		

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceed the GUIDELINE and this sample size is or INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48394, DDE (Dichlorodiphenyldichloroethylene)

Region 9

Forester Creek

LOE ID:	73711
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48394, DDE (Dichlorodiphenyldichloroethylene)

Region 9

Forester Creek

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID	48395	Region 9
Forester Creek		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48395, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Forester Creek

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48395, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Forester Creek

LOE ID: 73712

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	48396	Region 9
Forester Creek		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the [OBJECTIVE, GUIDELINE, CRITERIA]. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48396, Deltamethrin

Region 9

Forester Creek

LOE ID:	77756
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48396, Deltamethrin

Region 9

Forester Creek

LOE ID: 73749

Pollutant: Toxicity
 LOE Subgroup: Toxicity
 Matrix: Sediment
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
 Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation: The samples were collected at station 907SDFRC2.
 Temporal Representation: The samples were collected in May 2008.
 Environmental Conditions:
 QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

DECISION ID	48398	Region 9
Forester Creek		

Pollutant: Diazinon
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one

water sample and zero of the one sediment sample exceed the CRITERIA/GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water and zero of one sediment sample exceeded the CRITERIA/GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48398, Diazinon

Region 9

Forester Creek

LOE ID:	73716
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48398, Diazinon

Region 9

Forester Creek

LOE ID: 73749

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation: The samples were collected at station 907SDFRC2.

Temporal Representation: The samples were collected in May 2008.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48398, Diazinon

Region 9

Forester Creek

LOE ID: 73748

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48398, Diazinon

Region 9

Forester Creek

LOE ID:	78028
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48398, Diazinon

Region 9

Forester Creek

LOE ID:	77757
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

48399

Region 9

Forester Creek

Pollutant:	Dieldrin (sediment)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48399, Dieldrin (sediment) Forester Creek

Region 9

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation:

The samples were collected at station 907SDFRC2.

Temporal Representation:

The samples were collected in May 2008.

Environmental Conditions:

QAPP Information:

All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48399, Dieldrin (sediment)

Region 9

Forester Creek

LOE ID: 73717

Pollutant: Dieldrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID 48403

Region 9

Forester Creek

Pollutant: Endrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48403, Endrin

Region 9

Forester Creek

LOE ID: 73718

Pollutant: Endrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

Guideline Reference: for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
[Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

Line of Evidence (LOE) for Decision ID 48403, Endrin
Forester Creek

Region 9

LOE ID: 73749

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation: The samples were collected at station 907SDFRC2.

Temporal Representation: The samples were collected in May 2008.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

DECISION ID 48760
Forester Creek

Region 9

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48760, Esfenvalerate/Fenvalerate	Region 9
Forester Creek	

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48760, Esfenvalerate/Fenvalerate
Forester Creek**

Region 9

LOE ID:	77758
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	48761	Region 9
Forester Creek		

Pollutant: Fenpropathrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48761, Fenpropathrin	Region 9
Forester Creek	

LOE ID: 73749
Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as

	being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48761, Fenprothrin Forester Creek

Region 9

LOE ID:	77759
Pollutant:	Fenprothrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenprothrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenprothrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenprothrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]

Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48324	Region 9
Forester Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48324, Lead	Region 9
Forester Creek	

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically

	significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48324, Lead

Region 9

Forester Creek

LOE ID:	73734
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48324, Lead
Forester Creek

Region 9

LOE ID: 73735

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]

Temporal Representation: Data was collected over the time period 5/26/2009-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 48324, Lead
Forester Creek

Region 9

LOE ID: 73728

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48762	Region 9
Forester Creek		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48762, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Forester Creek

LOE ID: 73749

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation: The samples were collected at station 907SDFRC2.
Temporal Representation: The samples were collected in May 2008.

Environmental Conditions:
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48762, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Forester Creek

LOE ID: 77760

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	48321	Region 9
Forester Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48321, Malathion

Region 9

Forester Creek

LOE ID:	73736
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48321, Malathion

Region 9

Forester Creek

LOE ID:	78031
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48763	Region 9
Forester Creek		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support
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rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48763, Mercury
Forester Creek**

Region 9

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48763, Mercury
Forester Creek**

Region 9

LOE ID: 73737

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	48772	Region 9
Forester Creek		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48772, Methyl Parathion
Forester Creek**

Region 9

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyaella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 48772, Methyl Parathion
Forester Creek**

Region 9

LOE ID:	77761
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	48773	Region 9
Forester Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Nickel Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the two water samples and zero of one sediment sample exceed the CRITERIA/GUIDELINE.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two water and zero of one sediment samples exceeded the CRITERIA/GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48773, Nickel
Forester Creek**

Region 9

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 48773, Nickel
Forester Creek**

Region 9

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 48773, Nickel
Forester Creek**

Region 9

LOE ID:	73740
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48773, Nickel

Region 9

Forester Creek

LOE ID:	73739
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems, Environmental Contamination and Toxicology, 39: 20-31

Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	49101	Region 9
Forester Creek		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49101, Nitrate/Nitrite (Nitrite + Nitrate as N)		Region 9
Forester Creek		

LOE ID:	73741
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	49104	Region 9
Forester Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49104, Nitrogen, Nitrite	Region 9
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Forester Creek

LOE ID:	73742
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	52037	Region 9
Forester Creek		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52037, PCBs (Polychlorinated biphenyls)

Region 9

Forester Creek

LOE ID:	72811
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 907SDFRC2 (Forrester Creek 2).
Temporal Representation:	The samples were collected on 5/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

52038

Region 9

Forester Creek

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 52038, Permethrin, total		Region 9
Forester Creek		
LOE ID:	73749	
Pollutant:	Toxicity	
LOE Subgroup:	Toxicity	
Matrix:	Sediment	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	TOXICITY TESTING	
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyaella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).	
Data Reference:	Statewide Stream Pollution Trends Study 2008	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based	

on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation:

The samples were collected at station 907SDFRC2.

Temporal Representation:

The samples were collected in May 2008.

Environmental Conditions:

QAPP Information:

All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 52038, Permethrin, total
Forester Creek**

Region 9

LOE ID: 73743

Pollutant: Permethrin, total
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).

Guideline Reference: [Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5](#)

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forester Creek 2 - 907SDFRC2]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

**DECISION ID 49106
Forester Creek**

Region 9

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE. Zero of one samples exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the GUIDELINE and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49106, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Forester Creek

LOE ID: 73747

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 5/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49106, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Forester Creek

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyaella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two water samples and zero of the one sediment sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two water and one sediment samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49108, Toxicity	Region 9
Forester Creek	

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 49108, Toxicity

Region 9

Forester Creek

LOE ID:	73749
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

DECISION ID	49107	Region 9
Forester Creek		

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three water samples and zero of the one sediment sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three water and one sediment samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49107, Zinc	Region 9
Forester Creek	

LOE ID: 73752
Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Forester Creek to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49107, Zinc

Region 9

Forester Creek

LOE ID:	73751
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek @ Greenfield Drive]
Temporal Representation:	Data was collected on a single day 5/18/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s): Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49107, Zinc

Region 9

Forester Creek

LOE ID: 73750

Pollutant: Zinc
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Forester Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 1 monitoring site [Forrester Creek 2 - 907SDFRC2]

Temporal Representation: Data was collected on a single day 5/21/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

Line of Evidence (LOE) for Decision ID 49107, Zinc

Region 9

Forester Creek

LOE ID: 73749

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 907SDFRC2.
Temporal Representation:	The samples were collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAPP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49107, Zinc

Region 9

Forester Creek

LOE ID:	73748
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from site 907_SMC02006, Forrester Creek and 907_SMC04054, San Diego River.

Temporal Representation: The samples were collected in June 2009.

Environmental Conditions:

QAPP Information: This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 49107, Zinc	Region 9
Forester Creek	

LOE ID: 73753

Pollutant: Zinc

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Forester Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]

Temporal Representation: Data was collected over the time period 5/26/2009-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	51692	Region 9
Forester Creek		

Pollutant: Benthic Community Effects

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects Forester Creek

Region 9

LOE ID:	9014
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Non-fixed station physical/chemical monitoring (conventional pollutant only)
Data Used to Assess Water Quality:	Four water samples were collected at Forester Creek station 2 (907SDFRC2) in May 2004, September 2004, April 2005, and February 2005, all showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L (U.S. EPA, 2000.
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Forrester Creek station 2(907SDFRC2).
Temporal Representation: Samples were collected in May 2004, September 2004, April 2005, and February 2005.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects
Forester Creek

Region 9

LOE ID: 73681

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: The IBI score for this water body was 16 which indicates that this water body may be considered to have impaired conditions.
Data Reference: [RWB9 Status Sampling 2007 and 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at the following station: 907SDFRC2 (Forrester Creek 2).
Temporal Representation: Survey done May 5, 2008.
Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects
Forester Creek

Region 9

LOE ID: 78026

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects

Region 9

Forester Creek

LOE ID:	78024
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Forester Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Forester Creek was collected at 2 monitoring sites [Forrester Creek - 907_SMC02006, "San Diego River" - 907_SMC04054]
Temporal Representation:	Data was collected over the time period 5/26/2009-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects

Region 9

Forester Creek

LOE ID:	79669
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three samples were taken at three stations in Forester Creek. All three samples were below the 0.79 threshold and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at: SMC04054 907SDFRC2 SMC02006

Temporal Representation:	The samples were collected in 2008 and 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information RWB9 Status Sampling 2007 and 2008 Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects	Region 9
Forester Creek	

LOE ID:	73680
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The sample collected had IBI score below 40. The scores was 4.3. tr11e SMC bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected at 907_SMC02006, Forrester Creek.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects	Region 9
Forester Creek	

LOE ID:	3344
Pollutant:	Phosphorus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Industrial Service Supply
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. Three of 10 averages were at or in exceedance of the standard.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek. The exact sampling location was not reported.
Temporal Representation:	Samples were collected in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. It is unknown how many samples the monthly average represents.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects

Region 9

Forester Creek

LOE ID:	3343
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Industrial Service Supply
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. Ten of 10 averages were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Forester Creek. The exact sampling location was not reported.
Temporal Representation:	Samples were collected in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. It is unknown how often samples were collected during each month.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51692, Benthic Community Effects

Region 9

Forester Creek

LOE ID:	9012
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Forester Creek 2 station 907SDFRC2 in May 2004, September 2004; February 2005; and April 2005. All showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek station 2(907SDFRC2).
Temporal Representation:	Samples were collected in May 2004, September 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

42728

Region 9

Forester Creek

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42728, Nitrogen Forester Creek

Region 9

LOE ID:	9012
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four water samples were collected at Forester Creek 2 station 907SDFRC2 in May 2004, September 2004; February 2005; and April 2005. All showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).

A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Forrester Creek station 2(907SDFRC2).

Temporal Representation:

Samples were collected in May 2004, September 2004, February 2005, and April 2005.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA](#)

DECISION ID	32406	Region 9
Forester Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Ten of the 10 samples exceed the Basin Plan criteria. Even though the number of samples is insufficient to determine with the confidence and power of the Listing Policy, a minimum of 61 samples would be needed before 10 exceedances would result in a delisting of this pollutant for this waterbody.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32406, Total Dissolved Solids	Region 9
Forester Creek	

LOE ID:	3343
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total Dissolved
Beneficial Use:	Industrial Service Supply
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. Ten of 10 averages were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek. The exact sampling location was not reported.
Temporal Representation:	Samples were collected in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. It is unknown how often samples were collected during each month.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	42809	Region 9
Forester Creek		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of 4 samples exceed the secondary drinking water MCL.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 4 samples exceed the secondary drinking water MCL and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are

available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42809, Sulfates

Region 9

Forester Creek

LOE ID:	9013
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Non-fixed station physical/chemical monitoring (conventional pollutant only)
Data Used to Assess Water Quality:	Four water samples were collected at Forester Creek station 2 in March 2002, April 2002, June 2002, and September 2002. Three showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standards for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek station 2(907SDFRC2).
Temporal Representation:	Samples were collected in March 2002, April 2002, June 2002, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

33283

Region 9

Forester Creek

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 9

samples exceed the Basin Plan criteria, and this does not exceed the allowable frequency of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33283, Turbidity

Region 9

Forester Creek

LOE ID:	3345
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Industrial Service Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon from 04/2000 to 12/2000. None of the 9 averages were in exceedance of the above standards. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters with other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek. The exact sampling location was not reported.
Temporal Representation:	Samples were collected from 04/2000 to 12/2000. Only monthly averages were reported. It is unknown how many samples per month the monthly average represents.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

44281

Region 9

Forester Creek

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Regional Board Conclusion:
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 10 samples exceeded the Basin Plan criteria, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

**Line of Evidence (LOE) for Decision ID 44281, Phosphorus
Forester Creek**

Region 9

LOE ID:	3344
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Industrial Service Supply
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data were collected by the City of El Cajon in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. Three of 10 averages were at or in exceedance of the standard.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Creek. The exact sampling location was not reported.
Temporal Representation:	Samples were collected in 09/1997 and monthly from 04/2000-12/2000. Only monthly averages were reported. It is unknown how many samples the monthly average represents.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 42648

Region 9

Forester Creek

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Four of 4 samples exceed the CTR value for Se and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 42648, Selenium

Region 9

Forester Creek

LOE ID:	9014
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Non-fixed station physical/chemical monitoring (conventional pollutant only)
Data Used to Assess Water Quality:	Four water samples were collected at Forrester Creek station 2 (907SDFRC2) in May 2004, September 2004, April 2005, and February 2005, all showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

CTR Freshwater Chronic (CCC) 5 ug/L (U.S. EPA, 2000.
[Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information:

Samples were collected at Forrester Creek station 2(907SDFRC2).
Samples were collected in May 2004, September 2004, April 2005, and February 2005.
Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego River \(Upper\)](#)
Water Body ID: CAR9073100020011025102439
Water Body Type: River & Stream

DECISION ID	51463	Region 9
San Diego River (Upper)		

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51463, Alkalinity as CaCO₃	Region 9
San Diego River (Upper)	

LOE ID: 75575
Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51463, Alkalinity as CaCO₃
San Diego River (Upper)**

Region 9

LOE ID:	75576
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51465	Region 9
San Diego River (Upper)		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINES.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the GUIDELINES and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51465, Aluminum		Region 9
San Diego River (Upper)		

LOE ID:	75577
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for

Data Reference:	Aluminum. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51465, Aluminum San Diego River (Upper)

Region 9

LOE ID:	75578
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51465, Aluminum

Region 9

San Diego River (Upper)

LOE ID:	75579
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51468	Region 9
San Diego River (Upper)		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water sample and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51468, Arsenic
San Diego River (Upper)**

Region 9

LOE ID:	75586
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51468, Arsenic
San Diego River (Upper)**

Region 9

LOE ID:	75588
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51468, Arsenic
San Diego River (Upper)**

Region 9

LOE ID:	75591
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to

Objective/Criterion Reference:	protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000). Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51468, Arsenic

Region 9

San Diego River (Upper)

LOE ID:	75590
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51468, Arsenic

Region 9

San Diego River (Upper)

LOE ID:	75589
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51733	Region 9
San Diego River (Upper)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

**Line of Evidence (LOE) for Decision ID 51733, Benthic Community Effects
San Diego River (Upper)**

Region 9

LOE ID:	72788
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	
Temporal Representation:	The station is: 907S00577
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

51494

Region 9

San Diego River (Upper)

Pollutant: Bifenthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51494, Bifenthrin San Diego River (Upper)

Region 9

LOE ID: 75593

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51494, Bifenthrin

Region 9

San Diego River (Upper)

LOE ID:	75592
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51495

Region 9

San Diego River (Upper)

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment and zero of the five water samples exceed the GUIDELINE and CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sediment and zero of five water samples exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51495, Cadmium
San Diego River (Upper)****Region 9**

LOE ID:	75719
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation: Data was collected on a single day 5/12/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51495, Cadmium

Region 9

San Diego River (Upper)

LOE ID: 75733
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 4
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation: Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51495, Cadmium

Region 9

San Diego River (Upper)

LOE ID: 75720
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51495, Cadmium

Region 9

San Diego River (Upper)

LOE ID:	75717
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51495, Cadmium
San Diego River (Upper)

Region 9

LOE ID:	75718
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51495, Cadmium
San Diego River (Upper)

Region 9

LOE ID:	75722
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 51495, Cadmium
San Diego River (Upper)**

Region 9

LOE ID:	75721
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51496	Region 9
San Diego River (Upper)		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51496, Chloride		Region 9
San Diego River (Upper)		

LOE ID:	75735
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51496, Chloride

Region 9

San Diego River (Upper)

LOE ID:	75737
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 50 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51496, Chloride

Region 9

San Diego River (Upper)

LOE ID: 75734

Pollutant: Chloride
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 50 mg/L.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 51515		Region 9
San Diego River (Upper)		
Pollutant:	Chlorpyrifos	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of two samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51515, Chlorpyrifos
San Diego River (Upper)**

Region 9

LOE ID:	75738
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response, CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 7/6/2006-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 51515, Chlorpyrifos
San Diego River (Upper)**

Region 9

LOE ID:	78106
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Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 7/6/2006-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51502	Region 9
San Diego River (Upper)		
Pollutant:	Chromium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water an zero of the one sediment samples exceed the CRITERIA and GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water sample and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51502, Chromium

Region 9

San Diego River (Upper)

LOE ID:	75749
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51502, Chromium

Region 9

San Diego River (Upper)

LOE ID: 75748

Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51502, Chromium
San Diego River (Upper)**

Region 9

LOE ID:	75750
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51502, Chromium
San Diego River (Upper)

Region 9

LOE ID:	75761
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51502, Chromium
San Diego River (Upper)**

Region 9

LOE ID: 75751

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 51511

Region 9

San Diego River (Upper)

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the five water and zero of the one sediment samples exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five water and zero of one sediment samples exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51511, Copper
San Diego River (Upper)**

Region 9

LOE ID:	75762
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51511, Copper
San Diego River (Upper)**

Region 9

LOE ID:	75763
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51511, Copper
San Diego River (Upper)**

Region 9

LOE ID:	75764
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness

Objective/Criterion Reference:	dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51511, Copper

Region 9

San Diego River (Upper)

LOE ID:	75765
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51511, Copper

Region 9

San Diego River (Upper)

LOE ID:	75766
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51511, Copper San Diego River (Upper)

Region 9

LOE ID:	75773
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51511, Copper
San Diego River (Upper)

Region 9

LOE ID:	75774
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID **51517**
San Diego River (Upper)

Region 9

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51517, Cyfluthrin
San Diego River (Upper)**

Region 9

LOE ID:	75775
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51517, Cyfluthrin
San Diego River (Upper)

Region 9

LOE ID:	75776
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51518
San Diego River (Upper)

Region 9

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 51518, Cyhalothrin, Lambda
San Diego River (Upper)**

Region 9

LOE ID:	75777
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51518, Cyhalothrin, Lambda
San Diego River (Upper)**

Region 9

LOE ID:	75786
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51519

Region 9

San Diego River (Upper)

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51519, Cypermethrin
San Diego River (Upper)**

Region 9

LOE ID:	75787
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51519, Cypermethrin

Region 9

San Diego River (Upper)

LOE ID:	75788
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51520	Region 9
San Diego River (Upper)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>
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This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51520, Deltamethrin
San Diego River (Upper)**

Region 9

LOE ID:	75789
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51520, Deltamethrin
San Diego River (Upper)**

Region 9

LOE ID:	75790
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51521	Region 9
San Diego River (Upper)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51521, Diazinon
San Diego River (Upper)**

Region 9

LOE ID:	75801
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 7/6/2006-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 51521, Diazinon
San Diego River (Upper)**

Region 9

LOE ID:	78113
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 7/6/2006-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51522	Region 9
San Diego River (Upper)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-
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Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51522, Esfenvalerate/Fenvalerate
San Diego River (Upper)**

Region 9

LOE ID: 75811

Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.

Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51522, Esfenvalerate/Fenvalerate
San Diego River (Upper)**

Region 9

LOE ID: 75812

Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine

Data Reference:	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51523	Region 9
San Diego River (Upper)		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51523, Fenpropathrin	Region 9
San Diego River (Upper)	

LOE ID:	75821
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51523, Fenpropathrin
San Diego River (Upper)**

Region 9

LOE ID:	75822
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

Objective/Criterion Reference:	life (Water Quality Control Plan for the San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51524		Region 9
San Diego River (Upper)		
Pollutant:	Iron	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 51524, Iron		Region 9
San Diego River (Upper)		
LOE ID:	75823	
Pollutant:	Iron	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51524, Iron

Region 9

San Diego River (Upper)

LOE ID:	75825
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site

Temporal Representation: [San Diego River below Sentenac Cr. - 907S00577]
 Environmental Conditions: Data was collected on a single day 5/12/2009.
 QAPP Information: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information Reference(s): The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51524, Iron	Region 9
San Diego River (Upper)	

LOE ID: 75824

Pollutant: Iron
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	51526	Region 9
San Diego River (Upper)		

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the five water and zero of the one sediment samples exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five water and zero of one sediment samples exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51526, Lead
San Diego River (Upper)**

Region 9

LOE ID:	75826
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51526, Lead
San Diego River (Upper)**

Region 9

LOE ID:	75832
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51526, Lead
San Diego River (Upper)**

Region 9

LOE ID:	75836
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51526, Lead
San Diego River (Upper)

Region 9

LOE ID:	75834
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51526, Lead

Region 9

San Diego River (Upper)

LOE ID:	75835
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51526, Lead**Region 9****San Diego River (Upper)**

LOE ID:	75833
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51530	Region 9
San Diego River (Upper)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51530, Malathion	Region 9
San Diego River (Upper)	

LOE ID:	75663
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Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 7/6/2006-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51530, Malathion
San Diego River (Upper)

Region 9

LOE ID:	78115
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 7/6/2006-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51533	Region 9
San Diego River (Upper)		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51533, Manganese	Region 9
San Diego River (Upper)	

LOE ID:	75665
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51533, Manganese
San Diego River (Upper)

Region 9

LOE ID:	75666
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51533, Manganese
San Diego River (Upper)

Region 9

LOE ID:	75664
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51536
San Diego River (Upper)

Region 9

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in

sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water sample and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51536, Nickel
San Diego River (Upper)**

Region 9

LOE ID:	75668
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51536, Nickel
San Diego River (Upper)

Region 9

LOE ID: 75674

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51536, Nickel
San Diego River (Upper)

Region 9

LOE ID: 75673

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51536, Nickel
San Diego River (Upper)

Region 9

LOE ID:	75672
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51536, Nickel

Region 9

San Diego River (Upper)

LOE ID:	75667
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51550	Region 9
San Diego River (Upper)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51550, Nitrate/Nitrite (Nitrite + Nitrate as N)
San Diego River (Upper)**

Region 9

LOE ID:	75675
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51558

Region 9

San Diego River (Upper)

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51558, Nitrogen, Nitrite
San Diego River (Upper)**

Region 9

LOE ID:	75677
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 6/9/2003-6/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

**Line of Evidence (LOE) for Decision ID 51558, Nitrogen, Nitrite
San Diego River (Upper)**

Region 9

LOE ID: 75676

Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

51554

Region 9

San Diego River (Upper)

Pollutant: Nitrogen, ammonia (Total Ammonia)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51554, Nitrogen, ammonia (Total Ammonia)
San Diego River (Upper)**

Region 9

LOE ID:	75585
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51554, Nitrogen, ammonia (Total Ammonia)**Region 9****San Diego River (Upper)**

LOE ID:	75584
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51554, Nitrogen, ammonia (Total Ammonia)**Region 9****San Diego River (Upper)**

LOE ID:	75583
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia â€™ Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51554, Nitrogen, ammonia (Total Ammonia)	Region 9
San Diego River (Upper)	

LOE ID:	75582
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia â€™ Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

DECISION ID	51561	Region 9
San Diego River (Upper)		

Pollutant: Permethrin, total
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51561, Permethrin, total	Region 9
San Diego River (Upper)	

LOE ID: 75684
Pollutant: Permethrin, total
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51561, Permethrin, total
San Diego River (Upper)**

Region 9

LOE ID:	75683
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51601
San Diego River (Upper)

Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeds the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51601, Selenium San Diego River (Upper)

Region 9

LOE ID:	75690
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation: Data was collected on a single day 5/12/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51601, Selenium

Region 9

San Diego River (Upper)

LOE ID: 75689
Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP
Water Quality Objective/Criterion: The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L.
Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation: Data was collected on a single day 5/12/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51601, Selenium

Region 9

San Diego River (Upper)

LOE ID: 75688
Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51622	Region 9
San Diego River (Upper)		
Pollutant:	Silver	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 51622, Silver		Region 9

San Diego River (Upper)

LOE ID:	75693
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51622, Silver

Region 9

San Diego River (Upper)

LOE ID:	75691
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51622, Silver
San Diego River (Upper)**

Region 9

LOE ID:	75692
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 51630
San Diego River (Upper)**

Region 9

Pollutant:	Specific Conductivity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero] of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51630, Specific Conductivity
San Diego River (Upper)**

Region 9

LOE ID: 75694

Pollutant: Specific Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).

Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52009	Region 9
San Diego River (Upper)		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52009, Temperature, water		Region 9
San Diego River (Upper)		

LOE ID:	75698
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	36791	Region 9
San Diego River (Upper)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36791, Total Dissolved Solids	Region 9
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San Diego River (Upper)

LOE ID:	75709
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 300 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36791, Total Dissolved Solids

Region 9

San Diego River (Upper)

LOE ID:	75708
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists

objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 300 mg/L.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation:

Data was collected on a single day 5/12/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 36791, Total Dissolved Solids

Region 9

San Diego River (Upper)

LOE ID: 3346

Pollutant: Total Dissolved Solids

LOE Subgroup: Testimonial Evidence

Matrix: Not Specified

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type:

PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:

From the letter written by the San Diego Baykeeper on 06/14/2004: There is also evidence that the San Diego River has problems with total dissolved solids. See Huntley, David and Serratore, Shannon, Groundwater Management Planning Study El Monte/Santee Basin. Draft Report Prepared by the San Diego County Groundwater Authority, San Diego CA (1999). This is particularly a problem because of the Santee-El Monte Groundwater Basin which runs directly under the river bed. Therefore, there is substantial surface to groundwater interaction, and opportunity for the total dissolved solids to enter into the water supply. (San Diego Baykeeper, 2004).

Data Reference:

[Placeholder reference 2006 303\(d\)](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

The objective is numeric.

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

From the Basin Plan: for inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.

Guideline Reference:

[Placeholder reference 2006 303\(d\)](#)

Spatial Representation:

The are is described as the Upper San Diego River. Exact location was not given.

Temporal Representation:

The letter was written on 06/14/2004. No other dates were provided. There is note of another study that dates back to 1999.

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36791, Total Dissolved Solids

Region 9

San Diego River (Upper)

LOE ID:	75707
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51634	Region 9
San Diego River (Upper)		
Pollutant:	Toxicity	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceeds the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum 	

of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51634, Toxicity
San Diego River (Upper)**

Region 9

LOE ID:	75710
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station907S00577.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

**DECISION ID 51635
San Diego River (Upper)**

Region 9

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeded the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51635, Turbidity
San Diego River (Upper)**

Region 9

LOE ID: 75711

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 20 NTU.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51635, Turbidity
San Diego River (Upper)

Region 9

LOE ID:	75712
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51640
San Diego River (Upper)

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in

sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the five water samples and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five water and zero of one sediment samples exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51640, Zinc
San Diego River (Upper)**

Region 9

LOE ID:	75727
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51640, Zinc
San Diego River (Upper)

Region 9

LOE ID: 75728

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51640, Zinc
San Diego River (Upper)

Region 9

LOE ID: 75723

Pollutant: Zinc
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51640, Zinc

Region 9

San Diego River (Upper)

LOE ID:	75726
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 51640, Zinc
San Diego River (Upper)**

Region 9

LOE ID:	75725
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51640, Zinc
San Diego River (Upper)**

Region 9

LOE ID:	75724
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51640, Zinc
San Diego River (Upper)**

Region 9

LOE ID:	75739
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected on a single day 6/9/2003 - 8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

51592

Region 9

San Diego River (Upper)

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the sixty-one samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of sixty-one samples exceeded the OBJECTIVE and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51592, pH San Diego River (Upper)

Region 9

LOE ID: 75685

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site

Temporal Representation: [San Diego River below Sentenac Cr. - 907S00577]
Environmental Conditions: Data was collected on a single day 5/12/2009.
QAPP Information: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s): The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51592, pH
San Diego River (Upper)

Region 9

LOE ID: 75687

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 60
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Zero of 60 samples exceeded the objective.
Data Reference: [Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the RSW-003 station.
Temporal Representation: Samples were collected once a month from January 2005 to December 2009.
Environmental Conditions:
QAPP Information: No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51592, pH
San Diego River (Upper)

Region 9

LOE ID: 75686

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53420	Region 9
San Diego River (Upper)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. Data from June 2003 to August 2008 show that 25 of 58 single samples exceed the water quality objective for enterococcus of a single sample maximum of 61/100 ml in fresh water.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Data from June 2003 to August 2008 show that 25 of 58 single samples exceed the water quality objective for enterococcus of a single sample maximum of 61/100 ml in fresh water and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria	Region 9
San Diego River (Upper)	

LOE ID:	75816
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five (5) of the sixty (60) samples exceeded the Fecal Coliform objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at the Carlton Hills Bridge station. WBID: CAR9073100020011025102439
Temporal Representation:	Samples were collected between January 2005 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75802
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	24
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 24 of 54 samples exceed the criterion for Enterococci.
Data Reference:	Data for Pathogens from San Diego River, 2006-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Riverford Road]

Temporal Representation: Data was collected over the time period 2/28/2006-2/6/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis.](#)

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID: 75803

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4

Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Enterococci.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]

Temporal Representation: Data was collected over the time period 6/9/2003-8/5/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID: 75699

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 14 of 54 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Pathogens from San Diego River, 2006-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Riverford Road]
Temporal Representation:	Data was collected over the time period 2/28/2006-2/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis.

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75700
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or

Objective/Criterion Reference:	indigenouaquatic life (Basin Plan). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]
Temporal Representation:	Data was collected over the time period 6/9/2003-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75701
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six (6) of the sixty (60) samples exceeded the Total Coliform objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Total Coliform concentration shall not exceed more than 10000/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at the Carlton Hills Bridge station. WBID: CAR9073100020011025102439
Temporal Representation:	Samples were collected between January 2005 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75804
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Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 16 of 53 samples exceed the criterion for Escherichia coli.
Data Reference:	Data for Pathogens from San Diego River, 2006-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 235 per 100 ml for E. coli in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Riverford Road]
Temporal Representation:	Data was collected over the time period 2/28/2006-2/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis.

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75805
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four (4) of the sixty (60) samples exceeded the E.Coli objective.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The E.Coli concentration shall not exceed more than 235/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at the Carlton Hills Bridge station. WBID: CAR9073100020011025102439
Temporal Representation:	Samples were collected between January 2005 and December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75813
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	50
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 3 of 50 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Pathogens from San Diego River, 2006-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Riverford Road]
Temporal Representation:	Data was collected over the time period 3/2/2006-2/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis.

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75814
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 14 of 50 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Pathogens from San Diego River, 2006-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Riverford Road]
Temporal Representation:	Data was collected over the time period 3/2/2006-2/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program and MS4 Program and Truesdail Laboratories Quality Assurance and Quality Control Manual for Environmental Sample Analysis.

Line of Evidence (LOE) for Decision ID 53420, Indicator Bacteria
San Diego River (Upper)

Region 9

LOE ID:	75815
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Diego River (Upper) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River @ Channel Road]

Temporal Representation:

Data was collected over the time period 6/9/2003-8/5/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	51560	Region 9
San Diego River (Upper)		

Pollutant: Oxygen, Dissolved
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Forty of the sixty-one samples exceed the OBJECTIVE for Warm Freshwater Habitat (even more would exceed for Cold Water Habitat).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty of sixty-one samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51560, Oxygen, Dissolved	Region 9
San Diego River (Upper)	

LOE ID: 72816

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 60 averages of Dissolved Oxygen concentrations had 40 exceedances.
Data Reference:	Data for Various Pollutants in the Middle San Diego River Basin, 2005-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the RSW-003 station.
Temporal Representation:	Samples were collected once a month from January 2005 to December 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in San Diego pursuant to the San Diego Municipal Stormwater Permit. Sometimes there is information on their submittal form.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 51560, Oxygen, Dissolved
San Diego River (Upper)**

Region 9

LOE ID:	75682
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51560, Oxygen, Dissolved San Diego River (Upper)	Region 9
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LOE ID: 75678

Pollutant: Oxygen, Dissolved
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	52018	Region 9
San Diego River (Upper)		

Pollutant: Sulfates
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Four of the six samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of six samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 52018, Sulfates
San Diego River (Upper)**

Region 9

LOE ID:	75695
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 52018, Sulfates
San Diego River (Upper)**

Region 9

LOE ID:	9017
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Five water samples were collected at San Diego River station 907SSDR15 on May 2004, September 2004, February 2005, and April 2005, four out of five showed excessive sulfate concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Diego River station 907SSDR15; (Latitude 32.7621, Longitude -117.1925).
Temporal Representation:	Samples were collected on May 2004, September 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 52018, Sulfates
San Diego River (Upper)

Region 9

LOE ID:	75697
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper)

Objective/Criterion Reference:	within the San Diego Hydrologic Unit is 65 mg/L. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52018, Sulfates

Region 9

San Diego River (Upper)

LOE ID:	75696
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Diego River (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for San Diego River (Upper) within the San Diego Hydrologic Unit is 65 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego River (Upper) was collected at 1 monitoring site [San Diego River below Sentenac Cr. - 907S00577]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 33623

Region 9

San Diego River (Upper)

Pollutant:	Excess Algal Growth
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.</p> <p>One line of evidence (visual observation) is available in the administrative record. The excess algae growth information is not backed by nutrient data. Excess algae growth information should not be placed on the section 303(d) list because is not a pollutant or toxicity (section 2 of the Listing Policy).</p>
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. The Regional Board will update this decision when new data and information become available and are assessed.</p> <p>After review of the available data and information, Regional Board staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the information is not based on a condition and not a pollutant.</p>

**Line of Evidence (LOE) for Decision ID 33623, Excess Algal Growth
San Diego River (Upper)**

Region 9

LOE ID:	3349
Pollutant:	Excess Algal Growth
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	From the letter written on 06/14/2004 by the San Diego Baykeeper: In the Santee portion of the San Diego River there have been visual observations that reveal foam and algal blooms, foul river odors, and trash dumping. (San Diego Baykeeper, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters and all beneficial uses, inland surface waters, bays and estuaries, and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The area is described as Upper San Diego River.
Temporal Representation:	A letter regarding pollution was written on 06/14/2004. No other dates were provided.
Environmental Conditions:	
QAPP Information:	QA Info Missing

DECISION ID	43100	Region 9
San Diego River (Upper)		

Pollutant: Foam/Flocs/Scum/Oil Slicks
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

 This pollutant is being considered for listing under sections 2.1, 3.6, and 3.10 of the Listing Policy.

 Under section 3.6, a single line of evidence is necessary to assess listing status while under section 3.10, a minimum of two lines of evidence are needed to assess listing status. One line of evidence is required are available in the administrative record to assess foams, flocculants, and oil slicks. Two lines of evidence are required for scum.

 Scum data is not backed by any nutrient data and therefore cannot be used as the basis for a listing on its own (section 2 of the Listing Policy).

 Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).

 This data was reviewed during the development of the 2002 303(d) List and was not considered to be the basis for a listing at that time. It is still not enough information to list this waterbody for this pollutant.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43100, Foam/Flocs/Scum/Oil Slicks	Region 9
San Diego River (Upper)	

LOE ID: 3348

 Pollutant: Foam/Flocs/Scum/Oil Slicks
 LOE Subgroup: Testimonial Evidence
 Matrix: Not Specified
 Fraction: None

 Beneficial Use: Municipal & Domestic Supply

 Number of Samples: 0
 Number of Exceedances: 0

 Data and Information Type: Not Specified
 Data Used to Assess Water Quality: From the letter written by the San Diego Baykeeper on 06/14/2004: . In the Santee portion of the San Diego River there have been visual observations that reveal foam and algal blooms, foul river odors, and trash dumping. (San Diego Baykeeper, 2004).

 Data Reference: [Placeholder reference 2006 303\(d\)](#)

 SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, waters shall not contain floating material, including solids, liquids foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The area is described as Upper San Diego River near Santee.
Temporal Representation:	The letter regarding pollution was written on 06/14/200. No other dates were provided.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33624	Region 9
San Diego River (Upper)		

Pollutant:	Sediment
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence (visual observation) is available in the administrative record. Information is not backed with numerical data. One time visual observation information should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy). (More likely, the sediment is destroying habitat.)

This data was reviewed during the development of the 2002 303(d) List and was not considered to be the basis for a listing at that time. It is still not enough information to list this waterbody for this pollutant.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33624, Sediment	Region 9
San Diego River (Upper)	

LOE ID:	3347
Pollutant:	Sediment
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	From the letter from the San Diego Baykeeper on 06/14/2004: The State Board has data that was submitted in 2002 by Suzanne M. Michel, Ph.D., Water Resources Geography,

which states that contaminants were dumped into the river by Lakeside Land Co, and sediment from Pier 3 was dumped into the river by the Naval Station. (San Diego Baykeeper, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for sediment states that the suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The area is described as Upper San Diego River. No other location information was reported.

Temporal Representation: The letter regarding possible impairment was written on 06/14/2004. No other dates were reported.

Environmental Conditions:

QAPP Information: QA Info Missing

QAPP Information Reference(s):

DECISION ID	32811	Region 9
San Diego River (Upper)		

Pollutant:	Taste and odor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record. Information is not backed with numerical data. Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).

This data was reviewed during the development of the 2002 303(d) List and was not considered to be the basis for a listing at that time. It is still not enough information to list this waterbody for this pollutant.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32811, Taste and odor	Region 9
San Diego River (Upper)	

LOE ID:	3350
Pollutant:	Taste and odor
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From the letter from the San Diego Baykeeper on 06/14/2004: . In the Santee portion of the San Diego River there have been visual observations that reveal foam and algal blooms, foul river odors, and trash dumping. (San Diego Baykeeper, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Odor is 3 units.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	The are is described as the Upper San Diego River.
Temporal Representation:	The letter regarding pollution was written on 06/14/2004. No other dates were provided.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	43381	Region 9
San Diego River (Upper)		

Pollutant:	Trash
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>One line of evidence is available in the administrative record. Information is not backed with numerical data. Based on the information presented, the water body-pollutant should not be placed on the section 303(d) list because it cannot be determined if the pollutant contribute or cause a toxicological effect (section 2 of the Listing Policy).</p> <p>This data was reviewed during the development of the 2002 303(d) List and was not considered to be the basis for a listing at that time. It is still not enough information to list this waterbody for this pollutant.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43381, Trash	Region 9
San Diego River (Upper)	

LOE ID:	3351
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Pollutant:	Trash
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	From the letter written by the San Diego Baykeeper on 06/14/2004: In the Santee portion of the San Diego River there have been visual observations that reveal foam and algal blooms, foul river odors, and trash dumping. (San Diego Baykeeper, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No objective was found.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The are is described as the Upper San Diego River.
Temporal Representation:	The letter regarding trash dumping was written on 06/14/2004. No other dates were provided.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [King Creek](#)
Water Body ID: CAR9073100020020306092623
Water Body Type: River & Stream

DECISION ID	51830	Region 9
King Creek		

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51830, Alkalinity as CaCO₃	Region 9
King Creek	

LOE ID: 74018
Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51830, Alkalinity as CaCO₃

Region 9

King Creek

LOE ID:	74017
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51831	Region 9
King Creek		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51831, Aluminum		Region 9
King Creek		

LOE ID:	74019
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51831, Aluminum King Creek

Region 9

LOE ID:	74021
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51831, Aluminum King Creek

Region 9

LOE ID:	74020
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51832	Region 9
King Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water sample and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water sample and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51832, Arsenic

Region 9

King Creek

LOE ID:	74029
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51832, Arsenic

Region 9

King Creek

LOE ID:	74027
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51832, Arsenic King Creek

Region 9

LOE ID:	74028
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51832, Arsenic
King Creek

Region 9

LOE ID:	74026
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51832, Arsenic
King Creek

Region 9

LOE ID:	74025
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use

Data Reference:	support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53336	Region 9
King Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.
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Line of Evidence (LOE) for Decision ID 53336, Benthic Community Effects	Region 9
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King Creek

LOE ID:	81136
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected from King Creek ~0.8mi above WF. 907S01434
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53336, Benthic Community Effects

Region 9

King Creek

LOE ID:	72756
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. The IBI score for this site was 53.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected from King Creek ~0.8mi above WF. 907S01434
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51837	Region 9
King Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51837, Bifenthrin
King Creek**

Region 9

LOE ID: 74030

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation: Data was collected on a single day 5/13/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51837, Bifenthrin
King Creek**

Region 9

LOE ID: 74031

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51840	Region 9
King Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sediment and zero of one water sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51840, Cadmium	Region 9
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King Creek

LOE ID:	74033
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51840, Cadmium

Region 9

King Creek

LOE ID:	74032
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51840, Cadmium
King Creek**

Region 9

LOE ID:	74034
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51840, Cadmium
King Creek**

Region 9

LOE ID:	74036
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Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51840, Cadmium
King Creek

Region 9

LOE ID:	74035
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation:

Data was collected on a single day 5/13/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

51848

Region 9

King Creek

Pollutant:

Chloride

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

Impairment from Pollutant or

Pollutant

Pollution:

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision

Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51848, Chloride

Region 9

King Creek

LOE ID:

74037

Pollutant:

Chloride

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Warm Freshwater Habitat

Number of Samples:

1

Number of Exceedances:

0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 50 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51848, Chloride King Creek

Region 9

LOE ID:	74038
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51848, Chloride

Region 9

King Creek

LOE ID:	74041
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 50 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51850	Region 9
King Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>
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This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water sample and zero of one sediment sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51850, Chromium

Region 9

King Creek

LOE ID:	74045
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51850, Chromium

Region 9

King Creek

LOE ID:	74046
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51850, Chromium

Region 9

King Creek

LOE ID:	74042
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51850, Chromium

Region 9

King Creek

LOE ID:	74043
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51850, Chromium

Region 9

King Creek

LOE ID:	74044
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51862	Region 9
King Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Copper Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sediment sample and zero of one water sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51862, Copper
King Creek**

Region 9

LOE ID:	74049
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51862, Copper
King Creek**

Region 9

LOE ID:	74048
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51862, Copper King Creek

Region 9

LOE ID:	74047
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51862, Copper

Region 9

King Creek

LOE ID: 74051

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51862, Copper

Region 9

King Creek

LOE ID: 74050

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51864	Region 9
King Creek		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51864, Cyfluthrin	Region 9
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King Creek

LOE ID:	74053
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51864, Cyfluthrin

Region 9

King Creek

LOE ID:	74052
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51868	Region 9
King Creek		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51868, Cyhalothrin, Lambda	Region 9
King Creek	

LOE ID:	74054
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Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51868, Cyhalothrin, Lambda King Creek

Region 9

LOE ID:	74055
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51871		Region 9
King Creek		
Pollutant:	Cypermethrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 51871, Cypermethrin		Region 9
King Creek		
LOE ID:	74057	
Pollutant:	Cypermethrin	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Cold Freshwater Habitat	

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51871, Cypermethrin King Creek

Region 9

LOE ID:	74056
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides.

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	51875	Region 9
King Creek		

Pollutant: Deltamethrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51875, Deltamethrin	Region 9
King Creek	

LOE ID: 74059

Pollutant: Deltamethrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51875, Deltamethrin

Region 9

King Creek

LOE ID:	74058
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51876, Esfenvalerate/Fenvalerate	Region 9
King Creek	

LOE ID:	74061
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

Objective/Criterion Reference:	life (Water Quality Control Plan for the San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51876, Esfenvalerate/Fenvalerate
King Creek**

Region 9

LOE ID:	74060
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 51877
King Creek**

Region 9

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51877, Fenpropathrin
King Creek

Region 9

LOE ID: 74062

Pollutant: Fenpropathrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51877, Fenpropathrin King Creek

Region 9

LOE ID:	74063
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

51878

Region 9

King Creek

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51878, Iron
King Creek**

Region 9

LOE ID:	74066
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51878, Iron
King Creek**

Region 9

LOE ID:	74064
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Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51878, Iron King Creek

Region 9

LOE ID:	74065
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51879	Region 9
King Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sediment sample and zero of the one water sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51879, Lead	Region 9
King Creek	

LOE ID:	74069
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51879, Lead

Region 9

King Creek

LOE ID:	74068
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51879, Lead
King Creek**

Region 9

LOE ID: 74067

Pollutant: Lead
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51879, Lead
King Creek**

Region 9

LOE ID: 73978

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	51881	Region 9
King Creek		

Pollutant: Manganese

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51881, Manganese	Region 9
King Creek	

LOE ID:	73981
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51881, Manganese King Creek

Region 9

LOE ID:	73980
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51881, Manganese

Region 9

King Creek

LOE ID: 73979

Pollutant: Manganese

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 0.05 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

51885

Region 9

King Creek

Pollutant: Nickel

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing

status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sediment and zero of one water sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51885, Nickel
King Creek**

Region 9

LOE ID:	73985
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51885, Nickel
King Creek**

Region 9

LOE ID:	73983
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51885, Nickel
King Creek**

Region 9

LOE ID:	73984
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51885, Nickel

Region 9

King Creek

LOE ID:	73982
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51885, Nickel

Region 9

King Creek

LOE ID:	73986
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Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51905	Region 9
King Creek		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum

of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51905, Nitrate/Nitrite (Nitrite + Nitrate as N)

Region 9

King Creek

LOE ID:	73987
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

51920

Region 9

King Creek

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51920, Nitrogen, Nitrite
King Creek**

Region 9

LOE ID:	73988
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID
King Creek**

51919

Region 9

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51919, Nitrogen, ammonia (Total Ammonia)		Region 9
King Creek		
LOE ID:	74024	
Pollutant:	Nitrogen, ammonia (Total Ammonia)	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.	
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51919, Nitrogen, ammonia (Total Ammonia)
King Creek

Region 9

LOE ID:	74023
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51919, Nitrogen, ammonia (Total Ammonia)
King Creek

Region 9

LOE ID:	74022
Pollutant:	Nitrogen, ammonia (Total Ammonia)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia â€™ Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51921	Region 9
King Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51921, Oxygen, Dissolved
King Creek**

Region 9

LOE ID:	73990
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51921, Oxygen, Dissolved
King Creek**

Region 9

LOE ID:	73989
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51922	Region 9
King Creek		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the
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**Line of Evidence (LOE) for Decision ID 51922, Permethrin, total
King Creek**
Region 9

LOE ID:	73991
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51922, Permethrin, total
King Creek**
Region 9

LOE ID:	73992
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51924	Region 9
King Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51924, Selenium	Region 9
King Creek	

LOE ID:	73995
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Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51924, Selenium
King Creek

Region 9

LOE ID:	73996
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek

~0.8mi above WF - 907S01434]
 Temporal Representation: Data was collected on a single day 5/13/2009.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51924, Selenium

Region 9

King Creek

LOE ID: 73997

Pollutant: Selenium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
 Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
 Temporal Representation: Data was collected on a single day 5/13/2009.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

51925

Region 9

King Creek

Pollutant: Silver
 Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
 Last Listing Cycle's Final Listing Decision: New Decision
 Revision Status: Revised
 Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51925, Silver
King Creek**

Region 9

LOE ID:	73999
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51925, Silver
King Creek**

Region 9

LOE ID:	73998
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51925, Silver King Creek

Region 9

LOE ID:	74000
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation: Data was collected on a single day 5/13/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	51926	Region 9
King Creek		

Pollutant: Specific Conductivity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51926, Specific Conductivity	Region 9
King Creek	

LOE ID: 74001

Pollutant: Specific Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51927		Region 9
King Creek		
Pollutant:	Sulfates	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 51927, Sulfates		Region 9

King Creek

LOE ID:	74004
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 65 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51927, Sulfates

Region 9

King Creek

LOE ID:	74002
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51927, Sulfates	Region 9
King Creek	

LOE ID:	74003
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 65 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51928	Region 9
King Creek		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 51928, Temperature, water King Creek

Region 9

LOE ID:	74005
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51929	Region 9
King Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. One of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51929, Total Dissolved Solids		Region 9
King Creek		

LOE ID:	74006
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51929, Total Dissolved Solids King Creek

Region 9

LOE ID:	74008
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 300 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51929, Total Dissolved Solids King Creek

Region 9

LOE ID:	74007
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Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 300 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51930	Region 9
King Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51930, Toxicity
King Creek**

Region 9

LOE ID:	74009
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 907S01434.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

**DECISION ID 51951
King Creek**

Region 9

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51951, Turbidity		Region 9
King Creek		
LOE ID:	74010	
Pollutant:	Turbidity	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).	
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 20 NTU.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]	
Temporal Representation:	Data was collected on a single day 5/13/2009.	

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51951, Turbidity
King Creek**

Region 9

LOE ID: 74011

Pollutant: Turbidity
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for King Creek within the San Diego Hydrologic Unit is 20 NTU.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation: Data was collected on a single day 5/13/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

51954

Region 9

King Creek

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one

sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of sediment sample and zero of one water sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51954, Zinc

Region 9

King Creek

LOE ID:	74012
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51954, Zinc

Region 9

King Creek

LOE ID:	74013
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51954, Zinc

Region 9

King Creek

LOE ID:	74014
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51954, Zinc
King Creek**

Region 9

LOE ID:	74015
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51954, Zinc
King Creek**

Region 9

LOE ID:	74016
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51923	Region 9
King Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and
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information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51923, pH
King Creek**

Region 9

LOE ID: 73993

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]
Temporal Representation: Data was collected on a single day 5/13/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51923, pH
King Creek**

Region 9

LOE ID: 73994

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for King Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for King Creek was collected at 1 monitoring site [King Creek ~0.8mi above WF - 907S01434]

Temporal Representation:

Data was collected on a single day 5/13/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Alpine Creek](#)
Water Body ID: CAR9073300019990208084333
Water Body Type: River & Stream

DECISION ID	48211	Region 9
Alpine Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48211, Cadmium	Region 9
Alpine Creek	

LOE ID: 72989
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48211, Cadmium

Region 9

Alpine Creek

LOE ID:	72990
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48273	Region 9
Alpine Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the drinking water GUIDELINE. It is unknown whether any of the six samples exceeded the cold freshwater habitat guideline, as the detection limit of the analyses used is higher than the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the GUIDELINE for drinking water (unknown whether any samples exceeded the cold freshwater guideline) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48273, Chlorpyrifos	Region 9
Alpine Creek	

LOE ID:	72991
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Midway Drive, Alpine Creek @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48273, Chlorpyrifos Alpine Creek

Region 9

LOE ID:	77980
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Âµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Midway Drive, Alpine Creek @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48213	Region 9
Alpine Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48213, Copper		Region 9
Alpine Creek		

LOE ID:	72993
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48213, Copper

Region 9

Alpine Creek

LOE ID:	72992
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine

Temporal Representation:	Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Environmental Conditions:	Data was collected from 5/20/2003 through 6/17/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48217	Region 9
Alpine Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48217, Diazinon		Region 9
Alpine Creek		

LOE ID:	72994
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Midway Drive, Alpine Creek @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48217, Diazinon

Region 9

Alpine Creek

LOE ID:	77981
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Midway Drive, Alpine Creek @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48218	Region 9
Alpine Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48218, Lead	Region 9
Alpine Creek	

LOE ID:	72998
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for

Data Reference:	Lead. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48218, Lead

Region 9

Alpine Creek

LOE ID:	72997
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

DECISION ID	48269	Region 9
Alpine Creek		

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48269, Malathion	Region 9
Alpine Creek	

LOE ID: 77982
Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 6
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Malathion.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Midway Drive, Alpine Creek @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48269, Malathion

Region 9

Alpine Creek

LOE ID:	72999
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Midway Drive, Alpine Creek @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48271	Region 9
Alpine Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48271, Nitrogen, Nitrite	Region 9
Alpine Creek	

LOE ID:	73000
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected on a single day 5/20/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48270	Region 9
Alpine Creek		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48270, Nitrogen, ammonia (Total Ammonia)	Region 9
Alpine Creek	

LOE ID:	72988
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected on a single day 5/20/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48272	Region 9
Alpine Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of ten samples exceeded the CRITERIA and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48272, Zinc

Region 9

Alpine Creek

LOE ID:	73003
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48272, Zinc

Region 9

Alpine Creek

LOE ID:	73002
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Alpine Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53440	Region 9
Alpine Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 9 of 11, and 5 of 11 single samples exceed the water quality objectives for enterococcus and fecal coliform of a single sample maximum of 61/100 ml and 400/100 ml, respectively, for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2003 to 2009 show that 9 of 11, and 5 of 11 single samples exceed the water quality objectives for enterococcus and fecal coliform of a single sample maximum of 61/100 ml and 400/100 ml, respectively, for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53440, Indicator Bacteria

Region 9

Alpine Creek

LOE ID:	73001
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected over the time period 5/20/2003-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53440, Indicator Bacteria

Region 9

Alpine Creek

LOE ID:	72996
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]
Temporal Representation:	Data was collected over the time period 5/20/2003-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53440, Indicator Bacteria

Region 9

Alpine Creek

LOE ID:	72995
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Alpine Creek to determine beneficial use support and results are as follows: 9 of 11 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Alpine Creek was collected at 2 monitoring sites [Alpine Creek @ Tavern Road, Alpine Creek @ Midway Drive]

Temporal Representation:

Data was collected over the time period 5/20/2003-6/17/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Chocolate Creek](#)
Water Body ID: CAR9073300020020306144308
Water Body Type: River & Stream

DECISION ID	44302	Region 9
Chocolate Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 44302, Benthic Community Effects	Region 9
Chocolate Creek	

LOE ID: 79670
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following station: 907SDCHC3 (Chocolate Creek 3).
Temporal Representation:	Survey done May 8, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44302, Benthic Community Effects Chocolate Creek

Region 9

LOE ID:	73283
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 20 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	Samples were collected at the following station: 907SDCHC3 (Chocolate Creek 3).
Temporal Representation:	Survey done May 8, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44302, Benthic Community Effects

Region 9

Chocolate Creek

LOE ID:	8929
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Chocolate Creek station 907SDCHC3 in May 2004, February 2005, and April 2005. Two of three showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Chocolate Creek station (907SDCHC3).
Temporal Representation:	Samples were collected on May 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 44302, Benthic Community Effects

Region 9

Chocolate Creek

LOE ID:	8928
Pollutant:	Phosphorus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Chocolate Creek station 907SDCHC3 in May 2004, February 2005, and April 2005. Two of three showed excessive phosphorus concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Chocolate Creek station (907SDCHC3).
Temporal Representation:	Samples were collected in May 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44302, Benthic Community Effects

Region 9

Chocolate Creek

LOE ID:	8926
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Chocolate Creek station 907SDCHC3 in May 2004, February 2005, and April 2005, all showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional

Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Water samples were collected at Chocolate Creek station (907SDCHC3).

Temporal Representation:

Samples were collected on May 2004, February 2005, and April 2005.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 44302, Benthic Community Effects

Region 9

Chocolate Creek

LOE ID: 26378

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: One sample of IBI data was taken from May 2004 at one sampling site. Of that one sample, one sample exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at one site: 907CHC2xx on Chocolate Creek.

Temporal Representation: Sampling occurred during one event on May 22, 2004.

Environmental Conditions:

QAPP Information:

Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality

QAPP Information Reference(s):

Assurance Project Plan.

[State of California, California Monitoring and Assessment Program: "CMAP".](#)
[Quality Assurance Project Plan for the California Stream Bioassessment Procedure](#)
[The San Diego Stream Team Quality Assurance Project Plan](#)

DECISION ID	53449	Region 9
Chocolate Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53449, Cadmium	Region 9
Chocolate Creek	

LOE ID:	73284
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53449, Cadmium
Chocolate Creek

Region 9

LOE ID:	73285
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	53438	Region 9
Chocolate Creek		

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53438, Chlorpyrifos	Region 9
Chocolate Creek	

LOE ID: 78003
Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 4
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53438, Chlorpyrifos Chocolate Creek

Region 9

LOE ID:	73286
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	53450	Region 9
Chocolate Creek		

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53450, Copper	Region 9
Chocolate Creek	

LOE ID: 73287
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 6
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 53450, Copper
Chocolate Creek**

Region 9

LOE ID:	73288
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53442, Diazinon	Region 9
Chocolate Creek	

LOE ID:	73289
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

Objective/Criterion Reference:	sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53442, Diazinon

Region 9

Chocolate Creek

LOE ID:	78004
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Âµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

53451

Region 9

Chocolate Creek

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of six samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53451, Lead Chocolate Creek

Region 9

LOE ID:	73293
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the

hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]

Temporal Representation: Data was collected from 5/20/2003 through 6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53451, Lead

Region 9

Chocolate Creek

LOE ID: 73292

Pollutant: Lead

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]

Temporal Representation: Data was collected from 5/20/2003 through 6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

53443

Region 9

Chocolate Creek

Pollutant:

Malathion

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53443, Malathion
Chocolate Creek**

Region 9

LOE ID: 73294

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous

Guideline Reference: maximum for malathion is 0.1 Åµg/L.
[2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]

Temporal Representation: Data was collected over the time period 5/3/2006-6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53443, Malathion

Region 9

Chocolate Creek

LOE ID: 78005

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for malathion is 100 Åµg/L.

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]

Temporal Representation: Data was collected over the time period 5/3/2006-6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

53453

Region 9

Chocolate Creek

Pollutant: Nitrogen, Nitrite

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53453, Nitrogen, Nitrite
Chocolate Creek**

Region 9

LOE ID:	73295
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]

Temporal Representation:	Data was collected on a single day 5/20/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53448	Region 9
Chocolate Creek		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53448, Nitrogen, ammonia (Total Ammonia)		Region 9
Chocolate Creek		

LOE ID:	73282
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Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
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Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine

	beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected on a single day 5/20/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53452	Region 9
Chocolate Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53452, Zinc**Region 9****Chocolate Creek**

LOE ID:	73297
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53452, Zinc**Region 9****Chocolate Creek**

LOE ID:	73298
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Chocolate Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected from 5/20/2003 through 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53447	Region 9
Chocolate Creek		
Pollutant:	Indicator Bacteria	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2029	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Seven of seven samples, and 6 of 8 samples exceed the water quality objectives for enterococcus and fecal coliform of a SSM of 61/100ml and 400/100ml, respectively, for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of seven samples, and 6 of 8 samples exceed the water quality objectives for enterococcus and fecal coliform of a SSM of 61/100ml and 400/100ml, respectively, for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.	

Line of Evidence (LOE) for Decision ID 53447, Indicator Bacteria**Region 9****Chocolate Creek**

LOE ID:	73296
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected over the time period 5/20/2003-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53447, Indicator Bacteria**Region 9****Chocolate Creek**

LOE ID:	73291
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected over the time period 5/20/2003-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53447, Indicator Bacteria Chocolate Creek

Region 9

LOE ID:	73290
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chocolate Creek to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chocolate Creek was collected at 1 monitoring site [Chocolate Canyon Creek @ Arnold Way]
Temporal Representation:	Data was collected over the time period 5/20/2003-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	42678	Region 9
Chocolate Creek		

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the three samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of three samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42678, Nitrogen	Region 9
Chocolate Creek	

LOE ID: 8926

Pollutant: Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Three water samples were collected at Chocolate Creek station 907SDCHC3 in May 2004, February 2005, and April 2005, all showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Chocolate Creek station (907SDCHC3).
Temporal Representation:	Samples were collected on May 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	43144	Region 9
Chocolate Creek		
Pollutant:	Phosphorus	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2023	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Basin Plan water quality objective for phosphorus.</p> <p>According to Table 3.1 of the Listing Policy the minimum sample requirement is two.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 3 samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.	

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43144, Phosphorus
Chocolate Creek**

Region 9

LOE ID: 8928

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Three water samples were collected at Chocolate Creek station 907SDCHC3 in May 2004, February 2005, and April 2005. Two of three showed excessive phosphorus concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Water samples were collected at Chocolate Creek station (907SDCHC3).
Temporal Representation: Samples were collected in May 2004, February 2005, and April 2005.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

DECISION ID

44028

Region 9

Chocolate Creek

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of 3 samples

exceed the secondary MSL drinking water standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 3 samples exceed the secondary MSL drinking water standard and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44028, Sulfates
Chocolate Creek**

Region 9

LOE ID:	8929
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Chocolate Creek station 907SDCHC3 in May 2004, February 2005, and April 2005. Two of three showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Chocolate Creek station (907SDCHC3).
Temporal Representation:	Samples were collected on May 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Boulder Creek \(San Diego County\)](#)
Water Body ID: CAR9074100020020306091433
Water Body Type: River & Stream

DECISION ID	43879	Region 9
Boulder Creek (San Diego County)		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43879, Benthic Community Effects	Region 9
Boulder Creek (San Diego County)	

LOE ID: 26374
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 5

Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Five samples were taken from May 2001 to 2007 at one sampling site. Of the total number of samples, three samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 907BCBCRx on Boulder Creek.
Temporal Representation:	Sampling occurred during one event every other year over a seven year period from May 2001 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43879, Benthic Community Effects
Boulder Creek (San Diego County)

Region 9

LOE ID:	73062
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the six samples collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference:

Spatial Representation: The samples were collected at station 907REF-BC Boulder Creek.

Temporal Representation: The samples were collected in October 2005, May and October 2006 and May 2007, 2008, and 2010..

Environmental Conditions:

QAPP Information: The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 43879, Benthic Community Effects

Region 9

Boulder Creek (San Diego County)

LOE ID: 27024

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Four samples of IBI data were taken from October 2005 to May 2007 at one sampling site. Of the total number of samples, one sample exceeded the IBI impairment threshold.

Data Reference: [Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at one site: REF-BCR on Boulder Creek.

Temporal Representation:	Sampling occurred on four events from October 2005 to May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43879, Benthic Community Effects	Region 9
Boulder Creek (San Diego County)	

LOE ID:	79674
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples were taken at one station in Boulder Creek. The CSCI scores for this site are above the 0.79 threshold, and therefore the site is not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at station 907REF-BC Boulder Creek. Note this is co-located with SWAMP station 907SDBOC2
Temporal Representation:	The samples were collected in from 2005 to 2008
Environmental Conditions:	
QAPP Information:	The data was collected under the the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water sample and one of the three sediment samples exceed the GUIDELINES.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one water and one of three sediment samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

LOE ID:	21391
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Three samples were collected at Boulder Creek station 907SDBOC2 from May 2004 to April 2005, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - one of the three samples exhibit toxicity. Ceriodaphnia dubia survival/reproductive test - one of the three samples exhibit toxicity. Results were from California's Surface Water Ambient Monitoring Program, 2007. Water samples were collected on May 2004, February 2005, and April 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Boulder Creek station 907SDBOC2; (Latitude 32.96346, Longitude -116.66411).
Temporal Representation:	Water samples for Boulder Creek were collected on May 2004, February 2005, April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42339, Toxicity
Boulder Creek (San Diego County)

Region 9

LOE ID:	26275
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	One sample was collected at Boulder Creek station 907SDBOC2 from May 2004. Significant toxicity levels (SL) were not found in the following test: <i>Hyalella azteca</i> . Results were from California's Surface Water Ambient Monitoring Program, 2007. The sediment sample was collected in May 2004.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Toxicity Samples were collected at Boulder Creek station 907SDBOC2; (Latitude 32.96346, Longitude -116.66411).
Temporal Representation:	Sediment sample for Boulder Creek was collected on May 2004.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Chollas Creek](#)
Water Body ID: CAR9082200019990208140725
Water Body Type: River & Stream

DECISION ID	33808	Region 9
Chollas Creek		

Pollutant: Cadmium
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 63 samples exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 63 samples exceeded the criteria, and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 33808, Cadmium	Region 9
Chollas Creek	

LOE ID: 77998

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 23
Number of Exceedances: 3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 33808, Cadmium Chollas Creek

Region 9

LOE ID:	3355
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of 42 samples exceeded the CTR - CCC criteria for dissolved cadmium (San Diego RWQCB, 2001b).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Dissolved Cadmium Criterion for continuous concentration (CCC) in water for the protection of aquatic life is expressed as a function of the total hardness of the water body. The aquatic life criteria will vary depending of total hardness reported at the sampling site. The CCC for dissolved cadmium is the highest concentration to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects. This criterion is linked and applicable for the protection of aquatic life Beneficial Uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Six stations were sampled throughout the Chollas Creek watershed.
Temporal Representation:	Five samples were collected in June 1991 and March 1992. Forty-two samples were collected as part of the MS4 storm water permit between February 1994 and February 2003.
Environmental Conditions:	Chollas Creek is an urban creek that runs through portions of San Diego, La Mesa, and Lemon Grove before emptying into San Diego Bay.
QAPP Information:	NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33808, Cadmium	Region 9
Chollas Creek	

LOE ID:	3354
Pollutant:	Cadmium
LOE Subgroup:	Narrative Description Data
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Chollas Creek Metals TMDL was approved by RWQCB in 2004 and subsequently approved by USEPA.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33808, Cadmium	Region 9
Chollas Creek	

LOE ID:	73302
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Chollas Creek to

	determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	34268	Region 9
Chollas Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Chollas Creek Metals
TMDL Project Code:	165
Date TMDL Approved by USEPA:	12/18/2008
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.14 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.15 of the Policy. 3. Seventeen of 21 samples exceeded the criteria, and these exceed the allowable frequency listed in

Table 4.1 of the Listing Policy.

4. The "TMDLs for Copper, Lead, and Zinc in Chollas Creek" was approved by USEPA on 12/18/2008.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 34268, Copper
Chollas Creek**

Region 9

LOE ID:	3356
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 34268, Copper
Chollas Creek**

Region 9

LOE ID:	73252
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Chollas Creek to

	determine beneficial use support and results are as follows: 17 of 21 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	44282	Region 9
Chollas Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Chollas Creek Metals
TMDL Project Code:	165
Date TMDL Approved by USEPA:	12/18/2008
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.14 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.15 of the Policy. 3. Four of 21 samples exceeded the criteria, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The "TMDLs for Copper, Lead, and Zinc in Chollas Creek" was approved by USEPA on 12/18/2008.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 44282, Lead
Chollas Creek**

Region 9

LOE ID:	73274
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Chollas Creek to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 44282, Lead
Chollas Creek**

Region 9

LOE ID:	3357
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	34327	Region 9
Chollas Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Chollas Creek Metals
TMDL Project Code:	165
Date TMDL Approved by USEPA:	12/18/2008
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.14 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.15 of the Policy.
3. Six of 21 samples exceeded the criteria, and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The "TMDLs for Copper, Lead, and Zinc in Chollas Creek" was approved by USEPA on 12/18/2008.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 34327, Zinc
Chollas Creek**

Region 9

LOE ID: 3358

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples:
Number of Exceedances:

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 34327, Zinc
Chollas Creek**

Region 9

LOE ID: 73281

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 21
Number of Exceedances: 6

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Chollas Creek to determine beneficial use support and results are as follows: 6 of 21 samples exceed the criterion for Zinc.

Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53133	Region 9
Chollas Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 23 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 23 samples exceeded the criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53133, Arsenic	Region 9
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Chollas Creek

LOE ID:	78007
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

43572

Region 9

Chollas Creek

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this indicator. Ten of Ten samples exceeded the water quality objective for benthic community effects, and Eleven out of Eleven</p>

samples exceeded the water quality objective for Benthic-Macroinvertebrate Bio-assessments.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 10 of 10 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area, and Eleven out of Eleven samples exceeded the water quality objective for Benthic-Macroinvertebrate Bio-assessments and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy, however as required under section 3.9 of the Listing Policy, pollutant(s) could not be directly associated with the Benthic Community Effects.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43572, Benthic Community Effects

Region 9

Chollas Creek

LOE ID:	26715
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Nine samples of IBI data were taken from May 2003 to May 2007 at one sampling site. Of the total number of samples, all nine samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: CC-FB on Chollas Creek.

Temporal Representation:	Sampling occurred during during May and October annually from May 2003 to May 2006 and one event on May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43572, Benthic Community Effects

Region 9

Chollas Creek

LOE ID:	72761
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven of the eleven samples collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at stations 908CC-FB and CC-NF54 on Chollas Creek.
Temporal Representation:	The samples were collected in May and October 2003 to 2006 and May 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43572, Benthic Community Effects

Region 9

Chollas Creek

LOE ID:	26521
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken on November 2005 at one sampling site. Of one sample, that one sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35. number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 908CLCANB on Chollas Creek.
Temporal Representation:	Sampling occurred during one event on November 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID		50632	Region 9
Chollas Creek			
Pollutant:	Chlordane		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	New Decision		
Revision Status	Revised		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence are necessary associating chemical concentrations with sediment toxicity to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Chlordane.</p>		

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50632, Chlordane
Chollas Creek**

Region 9

LOE ID:	72823
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 908SUP096 (Chollas Creek @ Ocean View).
Temporal Representation:	The samples were collected on 1/8/2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Chollas Creek

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 21 samples exceeded the criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53134, Chromium Chollas Creek

Region 9

LOE ID: 73251

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 21
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chromium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]

Temporal Representation: Data was collected over the time period 11/29/2001-10/5/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	50634	Region 9
Chollas Creek		

Pollutant: Cyfluthrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Cyfulthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cyfulthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50634, Cyfluthrin	Region 9
Chollas Creek	

LOE ID: 73253

Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50639	Region 9
Chollas Creek		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Cyhalothrin, Lambda.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cyhalothrin, Lambda and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50639, Cyhalothrin, Lambda Chollas Creek

Region 9

LOE ID:	73254
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 50642
Chollas Creek

Region 9

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for DDD (Dichlorodiphenyldichloroethane).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for DDD (Dichlorodiphenyldichloroethane) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50642, DDD (Dichlorodiphenyldichloroethane) Chollas Creek

Region 9

LOE ID:	73258
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50643		Region 9
Chollas Creek		
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for DDE (Dichlorodiphenyldichloroethylene).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for DDE (Dichlorodiphenyldichloroethylene) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 50643, DDE (Dichlorodiphenyldichloroethylene)		Region 9
Chollas Creek		
LOE ID:	73259	
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)	
LOE Subgroup:	Pollutant-Sediment	

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50644	Region 9
Chollas Creek		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for DDT (Dichlorodiphenyltrichloroethane).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for DDT (Dichlorodiphenyltrichloroethane) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy,

the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50644, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Chollas Creek

LOE ID:	73260
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

50645

Region 9

Chollas Creek

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of Five samples exceeded the Water Quality Criteria, and Zero of the One samples exceed the Evaluation Guideline for Deltamethrin..</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of Five samples exceeded the Water Quality Criteria, and Zero of the One samples exceed the Evaluation Guideline for Deltamethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50645, Deltamethrin Chollas Creek

Region 9

LOE ID:	73261
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 10/14/2006-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 50645, Deltamethrin
Chollas Creek

Region 9

LOE ID:	73262
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 50648
Chollas Creek

Region 9

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dieldrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50648, Dieldrin Chollas Creek

Region 9

LOE ID:	73266
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50655	Region 9
Chollas Creek		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50655, Endrin	Region 9
Chollas Creek	

LOE ID:	73267
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50656	Region 9
Chollas Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero for the Six samples exceeded the water quality criteria, and Zero of the One samples exceed the Evaluation Guideline for Esfenvalerate/Fenvalerate.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero for the Six samples exceeded the water quality criteria, and Zero of the One samples exceed

the Evaluation Guideline for Esfenvalerate/Fenvalerate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50656, Esfenvalerate/Fenvalerate
Chollas Creek**

Region 9

LOE ID:	73268
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 10/14/2006-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 50656, Esfenvalerate/Fenvalerate
Chollas Creek**

Region 9

LOE ID:	73269
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50660	Region 9
Chollas Creek		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Fenpropathrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Fenpropathrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50660, Fenpropathrin
Chollas Creek**

Region 9

LOE ID:	73270
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Pollutant:	Fipronil
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Evaluation Guideline for Fipronil.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Evaluation Guideline for Fipronil and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 50670, Fipronil	Region 9
Chollas Creek	

LOE ID:	73271
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50672	Region 9
Chollas Creek		

Pollutant:	Fipronil Sulfide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Evaluation Guideline for Fipronil Sulfide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Fipronil Sulfide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50672, Fipronil Sulfide	Region 9
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Chollas Creek

LOE ID:	73272
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50673	Region 9
Chollas Creek		

Pollutant:	Fipronil Sulfone
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Evaluation Guideline for Fipronil Sulfone.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Evaluation Guideline for Fipronil Sulfone and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50673, Fipronil Sulfone
Chollas Creek**

Region 9

LOE ID:	73273
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	50674	Region 9
Chollas Creek		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50674, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Chollas Creek

LOE ID: 73275

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53025	Region 9
Chollas Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 21 samples exceeded the criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53025, Nickel	Region 9
Chollas Creek	

LOE ID:	73277
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Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 53025, Nickel
Chollas Creek**

Region 9

LOE ID:	78000
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Nickel criteria for the protection of human health from consumption of organisms only is 4.6 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	50685	Region 9
Chollas Creek		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Permethrin, total.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Permethrin, total and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50685, Permethrin, total	Region 9
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Chollas Creek

LOE ID:	73278
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53037	Region 9
Chollas Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 23 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>
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303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 23 samples exceeded the criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53037, Selenium
Chollas Creek**

Region 9

LOE ID:	78001
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 53135
Chollas Creek

Region 9

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.2 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53135, Temperature, water	Region 9
Chollas Creek	

LOE ID:	72838
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Thirty five samples total were collected however there is no evaluation guideline for assessing temperature for the warm freshwater beneficial use.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Water Quality Control Plan San Diego Basin - Region 9).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at the following stations:
PBL-010-Harbor Dr. Bridge
PBL-015-National Ave and 33rd at Park One Towing
PBL-020-Federal Blvd.
PBL-040-Alpha St. and 38th St. Restoration area

Temporal Representation:

Samples were collected between January, 2009 and July, 2010.

Environmental Conditions:

QAPP Information:

"San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego)."

QAPP Information Reference(s):

[Quality Assurance Project Plan for San Diego Regional Water Quality Assessment and Outreach Project.](#)

DECISION ID	50661	Region 9
Chollas Creek		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50661, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)	Region 9
Chollas Creek	

LOE ID:	73279
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49066	Region 9
Chollas Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Six of the six samples exceed the objective for bifenthrin. Seventeen of 23 samples exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of six samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49066, Bifenthrin

Region 9

Chollas Creek

LOE ID:	73299
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49066, Bifenthrin

Region 9

Chollas Creek

LOE ID:	73301
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 10/14/2006-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49066, Bifenthrin

Region 9

Chollas Creek

LOE ID:	73280
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	17
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Twenty-three samples were collected to test for toxicity. Seventeen of the 23 samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 908CC-SD8(1) - Chollas Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 49066, Bifenthrin

Region 9

Chollas Creek

LOE ID:	72753
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated

Spatial Representation: The sample was collected at station 908SUP096.
 Temporal Representation: The sample was collected in January 2007.
 Environmental Conditions:
 QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	50633	Region 9
Chollas Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Five of the 20 samples (water) and 0 of the 0 samples (sediment) exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 29 samples (water) exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50633, Chlorpyrifos	Region 9
Chollas Creek	

LOE ID:	73250
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was detected, but not quantified and the reporting limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50633, Chlorpyrifos

Region 9

Chollas Creek

LOE ID:	77726
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	50641	Region 9
Chollas Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 an additional line of evidence associating chemical concentrations with sediment toxicity is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Five out of five samples (water) and zero out of one sample (sediment) exceeded the criteria for cypermethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five out of five samples (water) exceeded the criteria, and this exceeds the allowable frequency listed in table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

**Line of Evidence (LOE) for Decision ID 50641, Cypermethrin
Chollas Creek**

Region 9

LOE ID:	73257
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 10/14/2006-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 50641, Cypermethrin
Chollas Creek**

Region 9

LOE ID:	73255
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek @ Ocean View - 908SUP096]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50683	Region 9
Chollas Creek		

Pollutant:	Malathion
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Ten of the 20 samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. Ten of 20 samples exceed the Water Quality Criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50683, Malathion

Region 9

Chollas Creek

LOE ID:	73276
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 10 of 20 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/8/2002-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

32356

Region 9

Chollas Creek

Pollutant:	Diazinon
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Source Unknown
TMDL Name:	Chollas Creek Diazinon
TMDL Project Code:	56
Date TMDL Approved by USEPA:	11/03/2003
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Six of 23 samples (water) and zero of one sample (sediment) exceeded the criteria for diazinon. Also, 34 of 44 samples exhibited toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.14 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.15 of the Policy. 3. Six of 23 samples (water) exceeded the criteria, and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The "TMDL of Diazinon, Chollas Creek Watershed, San Diego County" was approved by USEPA on 11/03/2003. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32356, Diazinon

Region 9

Chollas Creek

LOE ID:	73264
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Chollas Creek to determine beneficial use support and results are as follows: 6 of 23 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas Creek - 908CC-SD8(1)]
Temporal Representation:	Data was collected over the time period 11/29/2001-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 32356, Diazinon

Region 9

Chollas Creek

LOE ID:	73265
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chollas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).Â
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chollas Creek was collected at 1 monitoring site [Chollas

Temporal Representation:	Creek @ Ocean View - 908SUP096]
Environmental Conditions:	Data was collected on a single day 1/8/2007.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	SWAMP data collected before September 2008 followed the QAMP 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

Line of Evidence (LOE) for Decision ID 32356, Diazinon

Region 9

Chollas Creek

LOE ID:	7484
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- One sample was collected and it shows significant toxicity as determined by the Selenastrum capricornutum growth test. Ceriodaphnia dubia- One sample was collected and it shows significant toxicity as determined by the Ceriodaphnia dubia survival/reproductive test according to results in a report submitted by Nautilus Environmental, 2006. The samples were collected on June 1-2, 2006.
Data Reference:	Results of Toxicity Testing for Aliso, Poggi, and Chollas Creeks
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the monitoring station Chollas Creek 4 located on the main stem of Chollas Creek (lat/long: 32.69629/-117.12237).
Temporal Representation:	The samples were collected on June 2, 2006.
Environmental Conditions:	
QAPP Information:	Toxicity test results met quality assurance requirements of the toxicity laboratory.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32356, Diazinon

Region 9

Chollas Creek

LOE ID:	26373
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Pollutant:	Sediment Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p><i>Hyallorella azteca</i>-</p> <p>One sample was collected and it shows significant toxicity as determined by both of the freshwater amphipod, <i>Hyallorella azteca</i>, survival/growth test according to results in a report submitted by Nautilus Environmental, 2006. The samples were collected on June 1-2, 2006.</p>
Data Reference:	Results of Toxicity Testing for Aliso, Poggi, and Chollas Creeks
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the monitoring station Chollas Creek 4 located on the main stem of Chollas Creek (lat/long: 32.69629/-117.12237).
Temporal Representation:	The samples were collected on June 2, 2006.
Environmental Conditions:	
QAPP Information:	Toxicity test results met quality assurance requirements of the toxicity laboratory.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32356, Diazinon
Chollas Creek

Region 9

LOE ID:	3353
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32356, Diazinon

Region 9

Chollas Creek

LOE ID: 72753

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference: [Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064](#)

Spatial Representation: The sample was collected at station 908SUP096.

Temporal Representation: The sample was collected in January 2007.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 32356, Diazinon

Region 9

Chollas Creek

LOE ID:	25002
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	14
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Selenastrum capricornutum- None of the 18 samples were found to be toxic as determined by at the Selenastrum capricornutum growth test.</p> <p>Ceriodaphnia dubia- Nine of 18 samples were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test.</p> <p>Hyalella azteca- Twelve of eighteen samples were found to be toxic as determined by the Hyalella azteca survival test according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected 2002 and 2006.</p>
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report Results of Toxicity Testing for Aliso, Poggi, and Chollas Creeks
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station for Chollas Creek. The station (SD 8) is located near 33 rd and Durant Street.
Temporal Representation:	The samples were collected on from 2002 through 2006.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Weston Solution Quality assurance plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 32356, Diazinon
Chollas Creek

Region 9

LOE ID:	73280
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	17
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-three samples were collected to test for toxicity. Seventeen of the 23 samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 908CC-SD8(1) - Chollas Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	43346	Region 9
Chollas Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-eight of the 40 samples exceed the Basin Plan water quality objective for total nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-eight of the 40 samples exceed the Basin Plan water quality objective for total nitrogen as N and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43346, Nitrogen
Chollas Creek**

Region 9

LOE ID:	7363
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The one sample collected exceeds the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2006. The sample was collected on June 2, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring station Chollas Creek 4 located on the main stem of Chollas Creek (lat/long: 32.69629/-117.12237).
Temporal Representation:	The sample was collected on June 2, 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

**Line of Evidence (LOE) for Decision ID 43346, Nitrogen
Chollas Creek**

Region 9

LOE ID: 6728

Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	37
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirty-seven of 39 samples exceeded the warm freshwater habitat water quality objective for Total Nitrogen outlined in the Urban Runoff Monitoring, Final Report, 2005-2006. Samples were collected two to four times a year from 1994 -2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located within the Chollas sub-watershed in the north fork of the Chollas Creek near the intersection of 33rd and Durant Streets.
Temporal Representation:	Samples were collected two to four times a year from 1994 - 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality assurance conducted according to the City of San Diego's Water Quality Department quality assurance manual.
QAPP Information Reference(s):	Water Quality Laboratory, Quality Assurance Manual

DECISION ID	44572	Region 9
Chollas Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Thirty-nine of the 40 samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-nine of the 40 samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 44572, Phosphorus

Region 9

Chollas Creek

LOE ID:	6706
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	39
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirty-nine of 40 samples exceeded the warm freshwater habitat water quality objective for Phosphorus outlined in the Urban Runoff Monitoring, Final Report, 2005-2006. Samples were collected two to four times a year from 1994-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located within the Chollas sub-watershed in the north fork of the Chollas Creek near the intersection of 33rd and Durant Streets.
Temporal Representation:	Samples were collected two to four times a year from 1994 -2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	Quality Assurance conducted according to the City of San Diego's Water Quality Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	Water Quality Laboratory, Quality Assurance Manual

DECISION ID	43167	Region 9
Chollas Creek		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.11 of the Listing Policy. Under section 3.11 listing may be proposed based on the situation-specific weight of evidence.</p> <p>Eight lines of evidence are available in the administrative record to assess this pollutant, these lines of evidence consist of interpretation of data from field survey/photo evidence.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight lines of evidence indicate that there is sufficient justification available in favor of placing this water segment-pollutant combination to the Section 303(d) list per Section 3.11 of the Listing Policy.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43167, Trash	Region 9
Chollas Creek	

LOE ID:	6108
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Trash distracts the eye at first glance and is one of the first things noticeable about the water body. Five of the six photos provided from Mike Chee of National Steel and Shipbuilding Company (NASSCO) exhibit excessive trash conditions within the NASCCO leasehold, which is adjacent to the mouth of Chollas Creek. This trash is reported to have

	originated from Chollas Creek after a storm event. Photos were taken January 10, 2005. (Chee, T.M., 2005).
Data Reference:	Email correspondence from T. Michael Chee of NASSCO to John Robertus of the San Diego Regional Water Quality Control Board, regarding trash conditions at mouth of Chollas Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Â– Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Photos were taken of trash flushed down Chollas Creek into NASSCO's leasehold . The NASSCO leasehold is adjacent to the mouth of Chollas Creek in San Diego Bay.
Temporal Representation:	Photos were taken January 10, 2005.
Environmental Conditions:	
QAPP Information:	None
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43167, Trash Chollas Creek

Region 9

LOE ID:	6111
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Trash distracts the eye at first glance and is one of the first things noticeable about the water body. Three of three photos taken prior to the I Love a Clean San Diego Creek to Bay Cleanup at the mouth of Chollas Creek exhibit excessive trash conditions within the creek channel. Other photos exhibit large amounts of trash removed from the mouth of Chollas Creek (I Love a Clean San Diego, 2007a).
Data Reference:	I Love a Clean San Diego. 2007a. Photos of trash in Chollas Creek. April 28, 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Â– Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Photos were taken of trash located at the mouth of Chollas Creek near Harbor Drive.
Temporal Representation:	Photos were taken April 28, 2007.
Environmental Conditions:	
QAPP Information:	None
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43167, Trash**Region 9****Chollas Creek**

LOE ID:	6121
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	<p>Trash conditions, where trash distracts the eye at first glance and is one of the first things noticeable about the water body. The presence of trash impacts the non contact recreational uses of Chollas Creek and San Diego Bay. Between 2002 and 2007, 9.2 tons (18,475 lbs) of trash were removed from Chollas Creek.</p> <p>In September 2002, 1253 pounds of trash were removed from the mouth of Chollas Creek. In September 2003, 643.5 pounds of trash were removed from Chollas Creek. In April 2004, 1525 pounds of trash were removed from the mouth of Chollas Creek. In September 2004, 278.5 pounds of trash were removed from the mouth of Chollas Creek. In April 2005, 1560 pounds of trash were removed from the mouth of Chollas Creek. In September 2005, 940 pounds of trash were removed from the mouth of Chollas Creek. In April 2006, 1600 pounds of trash were removed from the mouth of Chollas Creek. In September 2006, 2700 pounds of trash were removed from the mouth of Chollas Creek. In April 2007, 7975 pounds of trash were removed from the mouth of Chollas Creek, including 575 pounds of hazardous and electronic wastes (I Love a Clean San Diego, 2007b)</p>
Data Reference:	I Love a Clean San Diego. 2007a. Photos of trash in Chollas Creek, April 28, 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Â– Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Trash was collected in Chollas Creek near Harbor Drive at the mouth of Chollas Creek.
Temporal Representation:	Cleanup efforts in Chollas Creek took place annually or biannually from 2002 Â– 2007.
Environmental Conditions:	Data is from spring and fall, representing conditions at the start and end of the rainy season.
QAPP Information:	None
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43167, Trash**Region 9****Chollas Creek**

LOE ID:	26358
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Trash distracts the eye at first glance and is one of the first things noticeable about the water body.
	While conducting annual dry weather monitoring at 35 - 38 sites in the Chollas and Paleta Creek watersheds from 2003-2006, the City of San Diego's Creek Refuse Assessment Program estimated the amount of trash in both creeks. In 2003, the amount of trash was estimated to be 500 cu ft. In 2004, the amount estimated was 500 cu ft. In 2005, the amount estimated was 1250 cu ft. and in 2006, 200 cu ft. Trash was observed at nearly every monitoring location (City of San Diego, 2007).
Data Reference:	City of SD Trash 2007. Data on trash in Chollas Creek, 2003-2007. Semi-Annual Reports: Addressing Floating Material in Chollas and Paleta Creeks
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material A– Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The survey area covered 35 - 38 locations in Chollas and Paleta Creek.
Temporal Representation:	Dry weather monitoring took place between 2003 and 2006.
Environmental Conditions:	
QAPP Information:	None
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43167, Trash Chollas Creek

Region 9

LOE ID:	6104
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:
Number of Exceedances:

Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Trash distracts the eye at first glance and is one of the first things noticeable about the water body. Inspections of trash conditions in Chollas Creek were conducted August 31, 2001, February 15, 2002, November 8, 2002, May 14, 2004, and September 14, 2006. Photos were collected during the inspections. The photos were reviewed to assess trash conditions in Chollas Creek.
	All seven photos from August 31, 2001 exhibit poor trash conditions within the creek. One of three photos from February 15, 2002 exhibit poor trash conditions within the creek. All fifteen photos from November 8, 2002 exhibit poor trash conditions within the creek. All four photos from May 14, 2004 exhibit poor trash conditions within the creek. Sixteen of twenty photos from September 14, 2006 exhibit abundant trash within the creek (San Diego Regional Water Quality Control Board, 2006).
Data Reference:	Water Quality Control Plan for the San Diego Basin San Diego Regional Water Quality Control Board. 2001-2006. Facility Inspection Photos of

[Chollas Creek Trash](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Â– Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Photos were taken at eight Chollas Creek locations over the course of the inspections.
Temporal Representation:	Photos were taken in August 31, 2001, February 15, 2002, November 8, 2002, May 14, 2004, and September 14, 2006.
Environmental Conditions:	
QAPP Information:	None
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43167, Trash
Chollas Creek**

Region 9

LOE ID:	6110
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Trash distracts the eye at first glance and is one of the first things noticeable about the water body. All three photos from the United States Navy exhibit abundant trash within the creek after a storm event. (United States Navy, 2001).
Data Reference:	United States Navy. 2001. Photos of trash in Chollas Creek. January 11, 2001
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Â– Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Photos were taken of trash caught by the boom located at the mouth of Chollas Creek in San Diego Bay after a rain event.
Temporal Representation:	Photos were taken January 11, 2001.
Environmental Conditions:	Photos were taken following a rain event.
QAPP Information:	None
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43167, Trash
Chollas Creek**

Region 9

LOE ID:	6125
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Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Trash distracts the eye at first glance and is one of the first things noticeable about the water body. The San Diego County Municipal Storm Water Copermittees identified trash as a constituent of concern in the Pueblo San Diego Hydrologic Unit (which includes the Chollas Hydrologic Subarea) (San Diego County Municipal Storm Water Copermittees, 2007).
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Â– Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Pueblo San Diego Hydrologic Unit. The Chollas Creek watershed is a hydrologic subarea within this larger watershed.
Temporal Representation:	Conclusions made in reports dated 2007.
Environmental Conditions:	
QAPP Information:	None
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43167, Trash
Chollas Creek**

Region 9

LOE ID:	6123
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Trash distracts the eye at first glance and is one of the first things noticeable about the water body. Between 2002 and 2005, approximately 12.3 tons of trash was collected in Chollas Creek and at the Mouth of Chollas Creek near San Diego Bay.
	An April 9, 2005 cleanup effort of Chollas Creek west of 38th Street and north of Alpha Street yielded over one ton of trash.
	A September 17, 2005 cleanup effort of Chollas Creek near the corner of 47th Street and Castana Street yielded approximately 500 pounds of trash and debris.

A September 21, 2002 cleanup effort of Chollas Creek at Winona Avenue yielded approximately 490 pounds of trash.

A September 21, 2002 cleanup effort of Chollas Creek at 33rd Street and McLarens Lane yielded approximately 445 pounds of trash.

In its February 14, 2003 report, the City of San Diego states that the United States Navy removed 10.6 tons of trash from the mouth of Chollas Creek at the location of its trash boom.

Data Reference:

[City of SD Trash 2007. Data on trash in Chollas Creek, 2003-2007. Semi-Annual Reports: Addressing Floating Material in Chollas and Paleta Creeks](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Floating Material – Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Trash was collected at five locations that covers approximately 12 miles along Chollas Creek channel.

Temporal Representation:

The trash collection efforts took place between 2002 and 2005.

Environmental Conditions:

Data is from spring and fall, representing conditions at the start and end of the rainy season.

QAPP Information:

None

QAPP Information Reference(s):

DECISION ID	34499	Region 9
Chollas Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34499, Indicator Bacteria	Region 9
Chollas Creek	

LOE ID: 4447

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Paradise Creek, HSA 908.320](#)
Water Body ID: CAR9091200019991117092131
Water Body Type: River & Stream

DECISION ID 43648

Region 9

Paradise Creek, HSA 908.320

Pollutant: Phosphorus
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Four of the samples exceed the water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All four samples exceeded the phosphorus water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43648, Phosphorus

Region 9

Paradise Creek, HSA 908.320

LOE ID: 8496

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Paradise Creek station 908PPAR04 on May 2005, September 2005, January 2006 and April 2006. All four samples showed excessive phosphorus concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Paradise Creek station 908PPAR04; (Latitude 32.67115, Longitude -117.10303).
Temporal Representation:	Samples were collected on May 2005, September 2005, January 2006, April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	44863	Region 9
Paradise Creek, HSA 908.320		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 one line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the samples exceed the water quality objective for Selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All four samples exceeded the selenium water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

The Regional Board staff incorrectly assessed selenium as a conventional pollutant and applied table 3.2 of the listing Policy. Selenium is a toxicant and should be assessed using Table 3.1 . State Water Board staff has corrected this error and revised the recommendation to List for selenium. The revised recommendation is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceeded the water quality objective for selenium and this exceeds the allowable frequency under Section 3.1 of the Listing Policy.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44863, Selenium

Region 9

Paradise Creek, HSA 908.320

LOE ID:	8495
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Paradise Creek station 908PPAR04 on May 2005, September 2005, January 2006 and April 2006. All four samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L; (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin

Spatial Representation:	Water samples were collected at Paradise Creek station 908PPAR04; (Latitude 32.67115, Longitude -117.10303).
Temporal Representation:	Samples were collected on May 2005, September 2005, January 2006, April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Otay River](#)
Water Body ID: CAR9102000019991117160226
Water Body Type: River & Stream

DECISION ID	48478	Region 9
Otay River		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One lines of evidence is/are available in the administrative record to assess this indicator. Three of 24 samples exceeded the objective for the associated pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [NUMBER] of [NUMBER] samples exceeded the Index of Biological Integrity (IBI) value of poor water quality for this area and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy, however as required under section 3.9 of the Listing Policy, pollutant(s) could not be directly associated with the Benthic Community Effects.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48478, Benthic Community Effects	Region 9
Otay River	

LOE ID: 72764
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at stations 910OR-TWAS-1 on the Otay River.
Temporal Representation:	The sample was collected in May 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 48478, Benthic Community Effects Otay River

Region 9

LOE ID:	74476
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three of the 24 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129). Since there is no evaluation guideline for assessing temperature for the warm freshwater aquatic life beneficial use, this line of evidence will not be used for Listing Decisions in the 2012 Integrated Report and will be retired for said Listing cycle.
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA. Davis
Spatial Representation:	Samples were collected at the following stations: OTY-020-Otay Valley Regional Park- Date St. OTY-025-Otay R. at quarry OTY-030-Otay Valley Regional Park- South
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

DECISION ID	48477	Region 9
Otay River		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Three of the 24 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 3 of 24 samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48477, Temperature, water	Region 9
Otay River	

LOE ID: 74476

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three of the 24 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129). Since there is no evaluation guideline for assessing temperature for the warm freshwater aquatic life beneficial use, this line of evidence will not be used for Listing Decisions in the 2012 Integrated Report and will be retired for said Listing cycle.
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA, Davis
Spatial Representation:	Samples were collected at the following stations: OTY-020-Otay Valley Regional Park- Date St. OTY-025-Otay R. at quarry OTY-030-Otay Valley Regional Park- South
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Poggi Canyon Creek](#)
Water Body ID: CAR9102000020050630122106
Water Body Type: River & Stream

DECISION ID 43074 **Region 9**
Poggi Canyon Creek

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Three of the samples exceed the water quality objective for total nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three samples exceeded the nitrogen water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43074, Nitrogen **Region 9**
Poggi Canyon Creek

LOE ID: 21386
Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Three samples were collected at Poggi Creek station 910OTPOG3 from January to May 2003, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the three samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - one of the three samples exhibited toxicity.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water toxicity samples were collected at Poggi Creek station 910OTPOG3; (Latitude 32.60885, Longitude -117.02087).
Temporal Representation:	Water samples were collected on January, April, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43074, Nitrogen

Region 9

Poggi Canyon Creek

LOE ID:	7432
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Limited Warmwater
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Poggi Creek station 910OTPOG3 during January, April, and May 2003. All three samples showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Water samples were collected at Poggi Creek station 9100TPOG3; (Latitude 32.60885, Longitude -117.02087).

Temporal Representation: Samples were collected on January, April, and May 2003.

Environmental Conditions:

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [Water Quality Control Plan for the San Diego Basin](#)

DECISION ID	33299	Region 9
Poggi Canyon Creek		

Pollutant: DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. A sufficient number of samples exceed the California Toxic Rule: DDT human health carcinogenic risk for consumption of water & organisms of 0.00059 µg/L.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

Based on comments received from City of Chula Vista comment letter #10, on the April 19, 2010 State Water Board staff report for the 2010 Integrated Report, State Water Board staff recommended to remove this water body from the 303(d) list for DDT based on an error with the number of exceedances in the original decision. The original decision was based on 2 out of 3 samples exceeding the water quality objective but this was an error because only one out of 3 samples exceeded the water quality objective. The San Diego Regional Board staff had originally agreed to correct this error but the correction was inadvertently left out of the San Diego Regional Board's Integrated Report when it was submitted to the State Board for its review.

On August 4, 2010 the State Water Board approved the staff listing recommendation to remove this water body from the 303(d) list for DDT.
The final language for the recommendation is:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of three samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 3 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 33299, DDT (Dichlorodiphenyltrichloroethane)
Poggi Canyon Creek**

Region 9

LOE ID:	3359
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 3 sample exceeding CTR criterion (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	California Toxic Rule: DDT human health carcinogenic risk for consumption of water & organisms 0.00059 µg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sampling station at Poggi Creek: 32.6 -117.02114.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Otay River Watershed: 910.20.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33299, DDT (Dichlorodiphenyltrichloroethane)
Poggi Canyon Creek**

Region 9

LOE ID:	31433
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of 3 sample exceeding CTR criterion (SWAMP, 2004). This is a 2010 correction of the 2006 LOE # 3359 changing the number of exceedances from 2 to 1.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	California Toxic Rule: DDT human health carcinogenic risk for consumption of water & organisms 0.00059 µg/L. Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sampling station at Pogi Creek: 32.6 -117.02114.
Temporal Representation:	Samples were collected from March through September of 2002.
Environmental Conditions:	Otay River Watershed: 910.20.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	43673	Region 9
Poggi Canyon Creek		
Pollutant:	Selenium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of one sample exceeds the water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one sample exceeds the water quality objective for selenium. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial 	

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43673, Selenium

Region 9

Poggi Canyon Creek

LOE ID:	7427
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Limited Warmwater
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Poggi Creek station (910OTPOG3) on January, April, and May 2003. All three samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Poggi Creek station (910OTPOG3); (Latitude 32.60885, Longitude -117.02087).
Temporal Representation:	Samples were collected on January, April, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

43633

Region 9

Poggi Canyon Creek

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Three of the samples exceed the water quality objective for toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three samples exceed the toxicity water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43633, Toxicity
Poggi Canyon Creek**

Region 9

LOE ID: 21386

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 3

Data and Information Type: Ambient toxicity testing (chronic)
Data Used to Assess Water Quality: Three samples were collected at Poggi Creek station 910OTPOG3 from January to May 2003, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - three of the three samples exhibited toxicity. Ceriodaphnia dubia survival/reproductive test - one of the three samples exhibited toxicity.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Monitoring data for Region 9](#)

Spatial Representation:	Water toxicity samples were collected at Poggi Creek station 910OTPOG3; (Latitude 32.60885, Longitude -117.02087).
Temporal Representation:	Water samples were collected on January, April, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Dulzura Creek](#)
Water Body ID: CAR9103600020020306084017
Water Body Type: River & Stream

DECISION ID	49039	Region 9
Dulzura Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community does exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 49039, Benthic Community Effects	Region 9
Dulzura Creek	

LOE ID: 73514
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 37 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 910DZRA03 (Dulzura Creek 3).
Temporal Representation:	Survey done May 6, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49039, Benthic Community Effects

Region 9

Dulzura Creek

LOE ID:	79685
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was taken at one station on Delzura Creek. The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic

resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference:

[The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation:

Samples were collected at the following station: 910DZRA03 (Dulzura Creek 3).

Temporal Representation:

Survey done May 6, 2008.

Environmental Conditions:

QAPP Information:

Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.

QAPP Information Reference(s):

[RWB9 Status Sampling 2007 and 2008](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Tijuana River](#)
Water Body ID: CAR9111100019990208133940
Water Body Type: River & Stream

DECISION ID	44653	Region 9
Tijuana River		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2010
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 112 of 137 and 137 of 137 geomean samples exceed the water quality objectives for E. Coli. and total coliform of geomeans of 126/100ml and 1000/100ml, respectively, for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 112 of 137 and 137 of 137 geomean samples exceed the water quality objectives for E. Coli. and total coliform of geomeans of 126/100ml and 1000/100ml, respectively, for the protection of REC-1 and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44653, Indicator Bacteria	Region 9
Tijuana River	

LOE ID:	76807
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	137
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred and thirty-seven of the 137 samples exceeded the total coliform geomean objective.
Data Reference:	Data for bacteria and temperature in Alamo River, New River (Imperial County), and Tijuana River, Jan 2006-Mar. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Geometric Mean: The total coliform concentration shall not exceed more than 1000/100 ml.
Guideline Reference:	California Department of Public Health
Spatial Representation:	The samples were collected at Hollister Bridge and Dairy Mart Bridge.
Temporal Representation:	The samples were collected between January 2007 to February 2009. CAR9111100019990208133940
Environmental Conditions:	
QAPP Information:	Laboratory QA document is provided. The samples were analyzed under the City of San Diego EMTS Division Laboratory Quality Assurance Report.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44653, Indicator Bacteria	Region 9
Tijuana River	

LOE ID:	76808
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	151
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred and fifty-one (151) of the one hundred and fifty-five (155) samples exceeded the Total Coliform objective.
Data Reference:	Data for bacteria and temperature in Alamo River, New River (Imperial County), and Tijuana River, Jan 2006-Mar. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Total Coliform concentration shall not exceed more than 10000/100 ml. Basin Plan for the San Diego Region.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Hollister Bridge and Dairy Mart Bridge.
Temporal Representation:	The samples were collected between January 2007 to February 2009.

CAR9111100019990208133940

Environmental Conditions:

QAPP Information:

Laboratory QA document is provided. The samples were analyzed under the City of San Diego EMTS Division Laboratory Quality Assurance Report.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44653, Indicator Bacteria

Region 9

Tijuana River

LOE ID: 76792

Pollutant: Escherichia coli (E. coli)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 155

Number of Exceedances: 106

Data and Information Type: Not Specified

Data Used to Assess Water Quality: One hundred and six of the one hundred fifty-five (155) samples exceeded the E. Coli objective.

Data Reference: [Data for bacteria and temperature in Alamo River, New River \(Imperial County\), and Tijuana River, Jan 2006-Mar. 2010](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The E. Coli concentration shall not exceed more than 235/100 ml. Basin Plan for the San Diego Region.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected at Dairy Mart Bridge and Hollister Bridge.

Temporal Representation: The samples were collected between January 2007 to February 2009.

CAR9111100019990208133940

Environmental Conditions:

QAPP Information:

Laboratory QA document is provided. The samples were analyzed under the City of San Diego EMTS Division Laboratory Quality Assurance Report.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44653, Indicator Bacteria

Region 9

Tijuana River

LOE ID: 4741

Pollutant: Indicator Bacteria

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

2006.
 Data Reference: [Placeholder reference pre-2006 303\(d\)](#)
 SWAMP Data: Non-SWAMP
 Water Quality Objective/Criterion: Unspecified
 Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)
 Evaluation Guideline: Unspecified
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)
 Spatial Representation: Unspecified
 Temporal Representation: Unspecified
 Environmental Conditions: Unspecified
 QAPP Information: Unspecified
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44653, Indicator Bacteria
Tijuana River

Region 9

LOE ID: 76793
 Pollutant: Escherichia coli (E. coli)
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None
 Beneficial Use: Water Contact Recreation
 Number of Samples: 137
 Number of Exceedances: 112
 Data and Information Type: Not Specified
 Data Used to Assess Water Quality: One hundred twelve of the 137 samples exceeded the E. Coli geomean objective.
 Data Reference: [Data for bacteria and temperature in Alamo River, New River \(Imperial County\), and Tijuana River, Jan 2006-Mar. 2010](#)
 SWAMP Data: Non-SWAMP
 Water Quality Objective/Criterion: Geometric Mean: The E. Coli concentration shall not exceed more than 126/100 ml. Basin Plan for the San Diego Region.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
 Evaluation Guideline:
 Guideline Reference:
 Spatial Representation: The samples were collected at Dairy Mart Bridge and Hollister Bridge.
 Temporal Representation: The samples were collected between January 2007 to February 2009.
 Environmental Conditions: CAR9111100019990208133940
 QAPP Information: Laboratory QA document is provided. The samples were analyzed under the City of San Diego EMTS Division Laboratory Quality Assurance Report.
 QAPP Information Reference(s):

DECISION ID 43338
Tijuana River

Region 9

Pollutant: Selenium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess pollutant. Three of the 21 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 21 samples exceeded the objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43338, Selenium Tijuana River

Region 9

LOE ID:	21201
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two water samples were collected at Tijuana River station 911TTJR05 on May 2004, September 2004, February 2005, and April 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000). All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Water samples were collected at Tijuana River station (911TTJR05).
Temporal Representation: Samples were collected on May 2004, September 2004, February 2005, and April 2005.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43338, Selenium
Tijuana River

Region 9

LOE ID: 78140

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 19
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Selenium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]

Temporal Representation: Data was collected over the time period 1/29/2002-12/16/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID 43056
Tijuana River

Region 9

Pollutant: Toxicity
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess pollutant. Thirty four of the 34 samples (water) exceed the objective, and three of the three samples (sediment) exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty four of 34 samples exceeded the objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43056, Toxicity Tijuana River

Region 9

LOE ID:	7507
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Toxicity was observed in the following tests:</p> <p>Hyalella azteca growth and survival test- Five of 15 samples collected were found to be toxic.</p> <p>(Ceriodaphnia dubia test -15 of 15 samples were found to be toxic.)</p> <p>Ceriodaphnia dubia; All 15 samples were toxic according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007.</p> <p>Samples from the river were collected from January 2002 through February 2006.</p>
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected from the from the mass loading station on the Tijuana River and Hollister Street Bridge.
Temporal Representation:	Samples from the river were collected from January 2002 through February 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance Weston Solutions
QAPP Information Reference(s):	Weston Solutions. 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 43056, Toxicity

Region 9

Tijuana River

LOE ID:	25808
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	toxicity was observed in the Hyalella azteca survival and growth test- Two samples were collected and both show significant toxicity levels according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River was sampled on May 31, 2005 and April 10, 2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.
Temporal Representation:	The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the California's Surface Water Ambient Monitoring Program.
[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43056, Toxicity

Region 9

Tijuana River

LOE ID: 76810

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Preservation of Areas of Special Biological Significance

Number of Samples: 19
Number of Exceedances: 19

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Nineteen samples were collected to test for toxicity. Nineteen of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of *Hyalella azteca* and survival and reproduction of *Ceriodaphnia dubia*.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at station 911TJR-MLS Tijuana River.
Temporal Representation: The samples were collected from 2002 to 2008.
Environmental Conditions:
QAPP Information: The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 43056, Toxicity

Region 9

Tijuana River

LOE ID: 72751

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 911TJHRxx.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47156	Region 9
Tijuana River		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 19 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 19 samples exceeded the water quality objective, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-
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Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47156, Antimony

Region 9

Tijuana River

LOE ID: 78141

Pollutant: Antimony
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Antimony.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Antimony criteria for the protection of human health from consumption of organisms only is 4.3 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]

Temporal Representation: Data was collected over the time period 1/29/2002-12/16/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID

47150

Region 9

Tijuana River

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing

status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples (water) and zero of one sample (sediment) exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 19 samples exceeded the criterion, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 47150, Arsenic
Tijuana River**

Region 9

LOE ID:	76834
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Line of Evidence (LOE) for Decision ID 47150, Arsenic

Region 9

Tijuana River

LOE ID:	78143
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47151

Region 9

Tijuana River

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing

status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and one of one sample (water) exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample (water) and zero of one sample (sediment) exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47151, Bifenthrin

Region 9

Tijuana River

LOE ID:	76835
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972. with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47151, Bifenthrin

Region 9

Tijuana River

LOE ID:	76839
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

47313

Region 9

Tijuana River

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status.

Only one line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47313, Chlordane Tijuana River

Region 9

LOE ID:	72822
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 911TJHRxx (Tijuana River at Hollister Rd).
Temporal Representation:	The samples were collected on 5/22/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48052	Region 9
Tijuana River		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 17 samples (water) and zero of one sample (sediment) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 17 samples (water) exceeded the water quality objective, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. [Zero of one sample (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating; a minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.] 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48052, Chromium	Region 9
Tijuana River	

LOE ID:	76849
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tijuana River to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 48052, Chromium

Region 9

Tijuana River

LOE ID:	76848
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53166		Region 9
Tijuana River		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 17 samples (water) and zero of one sample (sediment) exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 17 samples (water) exceeded the criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.	

Line of Evidence (LOE) for Decision ID 53166, Copper		Region 9
Tijuana River		
LOE ID:	76852	
Pollutant:	Copper	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tijuana River to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 53166, Copper Tijuana River

Region 9

LOE ID:	76851
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53168	Region 9
Tijuana River		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53168, Cyfluthrin	Region 9
Tijuana River	

LOE ID:	77922
Pollutant:	Cyfluthrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	53169	Region 9
Tijuana River		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53169, Cyhalothrin, Lambda Tijuana River

Region 9

LOE ID:	77923
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**DECISION ID
Tijuana River**

53171

Region 9

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53171, DDD (Dichlorodiphenyldichloroethane)

Region 9

Tijuana River

LOE ID:	76782
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53175	Region 9
Tijuana River		

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53175, DDE (Dichlorodiphenyldichloroethylene)	Region 9
Tijuana River	

LOE ID:	76783
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53176	Region 9
Tijuana River		

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of
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16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53176, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Tijuana River

LOE ID:	76784
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

53179

Region 9

Tijuana River

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (water) and zero of one sample (sediment) exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (water) and zero of one sample (sediment) exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53179, Deltamethrin

Region 9

Tijuana River

LOE ID:	76787
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 53179, Deltamethrin

Region 9

Tijuana River

LOE ID:	77914
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID

53201

Region 9

Tijuana River

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53201, Dieldrin		Region 9
Tijuana River		
LOE ID:	76790	
Pollutant:	Dieldrin	
LOE Subgroup:	Pollutant-Sediment	
Matrix:	Sediment	
Fraction:	Total	
Beneficial Use:	Preservation of Rare & Endangered Species	
Number of Samples:	1	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.	
Data Reference:	Statewide Stream Pollution Trends Study 2008	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53206	Region 9
Tijuana River		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53206, Endrin	Region 9
Tijuana River	

LOE ID:	76791
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53213	Region 9
Tijuana River		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (water) and zero of one sample (sediment) exceeded the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of one sample (water) and zero of one sample (sediment) exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53213, Esfenvalerate/Fenvalerate
Tijuana River**

Region 9

LOE ID:	76794
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 53213, Esfenvalerate/Fenvalerate
Tijuana River**

Region 9

LOE ID:	77916
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53222		Region 9
Tijuana River		
Pollutant:	Fenprothrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.</p>	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53222, Fenpropathrin
Tijuana River**

Region 9

LOE ID:	77917
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	32713	Region 9
Tijuana River		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. In the first line of evidence (associated with LOE #3367), insufficient information is available for making listing decisions). In the second line of evidence (associated with LOE#76796), zero of the 17 samples exceed the California Toxics Rule criteria for Lead for the protection of aquatic lives.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 17 samples exceeded the California Toxics Rule and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 32713, Lead	Region 9
Tijuana River	

LOE ID:	76796
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tijuana River to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 32713, Lead

Region 9

Tijuana River

LOE ID:	3367
Pollutant:	Lead
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From the letter from the San Diego Baykeeper written 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Objectives are numeric, taken from CTR and Freshwater Sediment (Policy).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	From the CTR: Freshwater acute standard for lead is 64.58 ppb. Freshwater chronic standard is 2.52 ppb. The probable effects concentration for freshwater sediment is 128 ppm.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	The area with possible impairment is reported as the Tijuana River. Exact location was not reported.
Temporal Representation:	The letter suggesting impairment was written on 06/14/2004. Specific sample or study dates were not reported.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

53228

Region 9

Tijuana River

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53228, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Tijuana River

LOE ID: 77918

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53231	Region 9
Tijuana River		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53231, Mercury	Region 9
Tijuana River	

LOE ID:	76798
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Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	53246	Region 9
Tijuana River		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53246, Methyl Parathion Tijuana River

Region 9

LOE ID:	77919
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

**DECISION ID
Tijuana River**

43374

Region 9

Pollutant: Nickel

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 17 samples (water) and zero of one of sample (sediment) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 17 samples (water) exceeded the water quality objective, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. [Zero of one sample (sediment) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating; a minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.]
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 43374, Nickel
Tijuana River**

Region 9

LOE ID: 76800

Pollutant: Nickel
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43374, Nickel

Region 9

Tijuana River

LOE ID:	3368
Pollutant:	Nickel
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From the letter from the San Diego Baykeeper written on 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The objectives are numeric.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	From the CTR: The freshwater acute criteria for nickel (when the water hardness is 100) is 468.24 ppb and the freshwater chronic criteria (hardness= 100) is 52.06 ppb. Human Health Criteria for water and organisms is 610 ppb. Freshwater sediment criteria is 48.6 ppm.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	The waterbody with a possible impairment is the Tijuana River. Exact location was not reported.
Temporal Representation:	The letter documenting a possible impairment was written on 06/14/2004. Temporal representation for samples or studies was not reported.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43374, Nickel

Region 9

Tijuana River

LOE ID:	76801
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tijuana River to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43374, Nickel
Tijuana River

Region 9

LOE ID:	78138
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Nickel criteria for the protection of human health from consumption of organisms only is 4.6 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53250	Region 9
Tijuana River		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53250, PCBs (Polychlorinated biphenyls)	Region 9
Tijuana River	

LOE ID:	72815
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 911TJHRxx (Tijuana River at Hollister Rd).
Temporal Representation:	The samples were collected on 5/22/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53260	Region 9
Tijuana River		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the

power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53260, Permethrin, total
Tijuana River**

Region 9

LOE ID:	76802
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**DECISION ID 53269
Tijuana River**

Region 9

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53269, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Tijuana River

LOE ID:	76809
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et

Guideline Reference:	al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53273	Region 9
Tijuana River		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 17 samples (water) and zero of one sample (sediment) exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 17 samples (water) exceeded the criteria, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53273, Zinc	Region 9
Tijuana River	

LOE ID:	76813
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the 2002 QAMP.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53273, Zinc

Region 9

Tijuana River

LOE ID:	76814
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Tijuana River to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]

Temporal Representation:

Data was collected over the time period 1/29/2002-12/16/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed. [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

QAPP Information Reference(s):

DECISION ID	42754	Region 9
Tijuana River		

Pollutant: Ammonia as Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Ten of the 12 samples exceed the water quality objective for unionized ammonia for the protection of WARM beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 12 samples exceed the water quality objective for unionized ammonia for the protection of WARM beneficial use and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42754, Ammonia as Nitrogen	Region 9
Tijuana River	

LOE ID: 7193
Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Ten of twelve samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for un-ionized ammonia (NH3) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42754, Ammonia as Nitrogen Tijuana River

Region 9

LOE ID:	7380
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Tijuana River 5 monitoring station was sampled on April 10, 2006 and May 31, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for un-ionized ammonia (NH3) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the monitoring station Tijuana River 5 on the main stem of the

Temporal Representation:	Tijuana River. (Station ID: 911TTJR05; lat/long: 32.55132/-117.08439)
Environmental Conditions:	Tijuana River 5 monitoring station was sampled on April 10, 2006 and May 31, 2005. The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	43772	Region 9
Tijuana River		

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
 Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. It is important to note the CSCI does not have GIS data for the O/E component for portions of the watershed in Mexico. However, the pMMI results exhibited significant degradation in biological populations and/or communities as compared to reference site(s). 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met. The continued cross-border flows of sewage and untreated industrial discharges and stormwater, combined with the pMMI portion of the CSCI, provides sufficient weight of evidence that standards are not being met.
 Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects	Region 9
Tijuana River	

LOE ID:	7193
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Ten of twelve samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for un-ionized ammonia (NH3) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	76781
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	7384
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.
Temporal Representation:	The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.
Environmental Conditions:	The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the California's Surface Water Ambient Monitoring Program.
[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID: 7380

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Tijuana River 5 monitoring station was sampled on April 10, 2006 and May 31, 2005.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan the WQO for un-ionized ammonia (NH₃) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the monitoring station Tijuana River 5 on the main stem of the Tijuana River. (Station ID: 911TTJR05; lat/long: 32.55132/-117.08439)

Temporal Representation: Tijuana River 5 monitoring station was sampled on April 10, 2006 and May 31, 2005.

Environmental Conditions: The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID: 7381

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 15
Number of Exceedances: 15

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: All fifteen samples collected exceed the water quality objective according to results in the

Data Reference:	San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2001-2006. Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.
Temporal Representation:	Samples were collected two to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Weston Solutions QA Plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	7383
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.

Temporal Representation: Samples were collected two to four times a year from 2001-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects
Tijuana River

Region 9

LOE ID: 7382

Pollutant: Phosphorus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
 Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
 Data Used to Assess Water Quality: Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
 Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.

Temporal Representation: The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.

Environmental Conditions: The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects
Tijuana River

Region 9

LOE ID: 7507

Pollutant: Toxicity
 LOE Subgroup: Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Toxicity was observed in the following tests:</p> <p>Hyalella azteca growth and survival test- Five of 15 samples collected were found to be toxic.</p> <p>(Ceriodaphnia dubia test -15 of 15 samples were found to be toxic.)</p> <p>Ceriodaphnia dubia; All 15 samples were toxic according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007.</p> <p>Samples from the river were collected from January 2002 through February 2006.</p>
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected from the from the mass loading station on the Tijuana River and Hollister Street Bridge.
Temporal Representation:	Samples from the river were collected from January 2002 through February 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance Weston Solutions
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects
Tijuana River

Region 9

LOE ID:	21201
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two water samples were collected at Tijuana River station 911TTJR05 on May 2004, September 2004, February 2005, and April 2005.
Data Reference:	Monitoring data for Region 9

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000). All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California: Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Tijuana River station (911TTJR05).
Temporal Representation:	Samples were collected on May 2004, September 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	25808
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	toxicity was observed in the Hyalella azteca survival and growth test- Two samples were collected and both show significant toxicity levels according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River was sampled on May 31, 2005 and April 10, 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.

Temporal Representation:	The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	27032
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from May 2003 to May 2007 at one sampling site. Of the total number of samples, all four of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: TJ-DM&BF on Tijuana River.
Temporal Representation:	Sampling occurred during May from 2003 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	72771
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six of the six samples collected had an IBI score below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at stations 911TJR-MLS, TJ-BF, TJ-DM, and TJR-TWAS-2 Tijuana River.
Temporal Representation:	The samples were collected in May 2003 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects
Tijuana River

Region 9

LOE ID:	72751
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival of <i>Hyalella azteca</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 911TJHRxx.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	76839
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]

Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects	Region 9
Tijuana River	

LOE ID:	76797
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 11 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 11/8/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects	Region 9
Tijuana River	

LOE ID:	76789
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Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 18 of 19 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects
Tijuana River

Region 9

LOE ID:	78145
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID:	77920
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Chlorpyrifos. Four sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier

[et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]

Temporal Representation: Data was collected over the time period 1/29/2002-12/16/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID: 76810

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Preservation of Areas of Special Biological Significance

Number of Samples: 19

Number of Exceedances: 19

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Nineteen samples were collected to test for toxicity. Nineteen of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of *Hyalella azteca* and survival and reproduction of *Ceriodaphnia dubia*.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at station 911TJR-MLS Tijuana River.

Temporal Representation: The samples were collected from 2002 to 2008.

Environmental Conditions:

QAPP Information: The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 43772, Benthic Community Effects

Region 9

Tijuana River

LOE ID: 79690

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples were taken at one station on the Tijuana River between the international border and estuary. Two samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Two samples were not scored due to low organism counts. It is important to note that the O/E portion of the CSCI for these sites includes portions of the watershed that are in Mexico. The pMMI portion of the CSCI was examined for all site scores, with all results falling below 0.50, which is outside the reference distribution.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at stations 911TJR-TWAS-2 (proximal to 911TJR-MLS, TJ-BF, TJ-DM)
Temporal Representation:	The samples were collected in from 2003 to 2009
Environmental Conditions:	
QAPP Information:	Data collected following the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

DECISION ID	47312	Region 9
Tijuana River		

Pollutant:	Cadmium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of 19 samples (water) and zero of one sample (sediment) exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 19 samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47312, Cadmium Tijuana River

Region 9

LOE ID: 78145

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 19
Number of Exceedances: 3

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for Cadmium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]

Temporal Representation:

Data was collected over the time period 1/29/2002-12/16/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47312, Cadmium

Region 9

Tijuana River

LOE ID: 76840

Pollutant: Cadmium

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]

Temporal Representation: Data was collected on a single day 5/22/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the 2002 QAMP.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\).](#)

DECISION ID 47314

Region 9

Tijuana River

Pollutant: Chlorpyrifos

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Five of 15 samples (water) and zero of one sample (sediment) exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 15 samples exceed the guideline, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47314, Chlorpyrifos Tijuana River

Region 9

LOE ID:	77920
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Chlorpyrifos. Four sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).

Guideline Reference:

[Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation:

Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]

Temporal Representation:

Data was collected over the time period 1/29/2002-12/16/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 47314, Chlorpyrifos

Region 9

Tijuana River

LOE ID: 76847

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).

Guideline Reference: [Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.](#)

Spatial Representation: Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]

Temporal Representation: Data was collected on a single day 5/22/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

DECISION ID	47157	Region 9
Tijuana River		

Pollutant: Diazinon
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Eighteen of the 19 samples exceed the freshwater chronic value for diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of 19 samples exceed the freshwater chronic value for diazinon and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47157, Diazinon	Region 9
Tijuana River	

LOE ID: 77915
Pollutant: Diazinon
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Preservation of Rare & Endangered Species

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference: [Statewide Stream Pollution Trends Study 2008](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83-92.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47157, Diazinon

Region 9

Tijuana River

LOE ID:	76789
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 18 of 19 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 1/29/2002-12/16/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	53233	Region 9
Tijuana River		

Pollutant: Malathion

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Eleven of the 16 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 16 samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53233, Malathion	Region 9
Tijuana River	

LOE ID: 76797

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 16

Number of Exceedances: 11

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 11 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected over the time period 11/8/2002-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53170	Region 9
Tijuana River		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and one of one sample (water) exceeded the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (sediment) and one of one sample (water) exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53170, Cypermethrin
Tijuana River**

Region 9

LOE ID:	77924
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tijuana River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River at Hollister Rd - 911TJHRxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**Line of Evidence (LOE) for Decision ID 53170, Cypermethrin
Tijuana River**

Region 9

LOE ID:	76781
Pollutant:	Cypermethrin

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tijuana River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tijuana River was collected at 1 monitoring site [Tijuana River - 911TJR-MLS]
Temporal Representation:	Data was collected on a single day 12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 32711		Region 9
Tijuana River		
Pollutant:	Thallium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Thallium is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of zero of the samples exceed the California Toxics Rule water quality objective for Thallium.</p>	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the California Toxics Rule for thallium and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met; EXCEPT that the Information that is provided is based on visual observations and not supported by numerical data. Visual observation information alone is insufficient to place a water body segment pollutant combination on the section 303(d) list because it cannot be quantitatively determined if applicable water quality standards are met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32711, Thallium

Region 9

Tijuana River

LOE ID:	3369
Pollutant:	Thallium
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From the letter written by the San Diego Baykeeper on 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The objective is numeric.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	From the CTR, the human health freshwater criteria for water and organisms is 1.7 ppb.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	The letter suggesting impairment describes the waterbody as the Tijuana River. Exact location of samples or studies was not reported.
Temporal Representation:	Time of possible impairment was not reported. The letter suggesting impairment was written on 06/14/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

40562

Region 9

Tijuana River

Pollutant: Eutrophic
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40562, Eutrophic

Region 9

Tijuana River

LOE ID: 4740

Pollutant: Eutrophic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID

44569

Region 9

Tijuana River

Pollutant: Low Dissolved Oxygen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44569, Low Dissolved Oxygen

Region 9

Tijuana River

LOE ID: 4742

Pollutant: Low Dissolved Oxygen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID

43166

Region 9

Tijuana River

Pollutant:	Pesticides
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43166, Pesticides

Region 9

Tijuana River

LOE ID:	4743
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 43333

Region 9

Tijuana River

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Seventeen of 17 of the samples exceed the Basin Plan water quality objective for Phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of 17 of the samples exceed the Basin Plan water quality objective for Phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43333, Phosphorus Tijuana River

Region 9

LOE ID:	7382
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial

uses. (RWQCB, 2007)	
Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.
Temporal Representation:	The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.
Environmental Conditions:	The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43333, Phosphorus

Region 9

Tijuana River

LOE ID:	7381
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.
Temporal Representation:	Samples were collected two to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Weston Solutions QA Plan.
QAPP Information Reference(s):	Weston Solutions. 2004. Quality Management Manual. March 2004 (Revised December 2009).

DECISION ID

43580

Region 9

Tijuana River

Pollutant: Sedimentation/Siltation
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.7.2 of the Listing Policy. Under section 3.7.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Photos were collected by the Tijuana River National Estuarine Research Reserve. The photos were reviewed to assess sedimentation problem in the Tijuana River valley and estuary. Photos from February 13, 2008 Powerpoint presentation exhibit the sedimentation problem within the watershed. Aerial and ground level photographs show the changes that have occurred due to large storm events and over time. The occurrence of conditions judged to cause impairment and therefore exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The occurrence of conditions judged to cause impairment and therefore this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43580, Sedimentation/Siltation

Region 9

Tijuana River

LOE ID: 27012

Pollutant: Sedimentation/Siltation
LOE Subgroup: Pollutant-Nuisance
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:
Number of Exceedances:

Data and Information Type: Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality: Photos were collected by the Tijuana River National Estuarine Research Reserve. The photos were reviewed to assess sedimentation problem in the Tijuana River valley and estuary

Data Reference:	Photos from February 13, 2008 Powerpoint presentation exhibit the sedimentation problem within the watershed. Aerial and ground level photographs show the changes that have occurred due to large storm events and over time. Photographs of the sedimentation problem in the Tijuana River valley and estuary
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Information and photographs were collected at various locations in the Tijuana River watershed.
Temporal Representation:	Information and photographs were collected at various locations in the Tijuana River watershed all predating February 2008. One set of photos were before and after photographs dated May 10, 2003 and January 30, 2005.
Environmental Conditions:	
QAPP Information:	None
QAPP Information Reference(s):	

DECISION ID	34466	Region 9
Tijuana River		

Pollutant:	Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34466, Solids	Region 9
Tijuana River	

LOE ID:	4744
Pollutant:	Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	42793	Region 9
Tijuana River		

Pollutant:	Surfactants (MBAS)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Six of 15 of the samples exceed the Basin Plan water quality objective for surfactants (MBAS).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 15 of the samples exceed the Basin Plan water quality objective for surfactants (MBAS) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 42793, Surfactants (MBAS)

Region 9

Tijuana River

LOE ID:	7512
Pollutant:	Surfactants (MBAS)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Six of fifteen samples collected exceed the water quality objective. Since only four samples were collected at most in a one year period, any exceedance results in an annual exceedance frequency greater than 10%. All five years in which this water body was monitored found exceedances more than 10% of the time according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected three times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for methylene blue Å– activated substances (MBAS) for inland surface waters is 0.5mg/L. This concentration is not to be exceeded more than 10% of the time (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.
Temporal Representation:	Samples were collected three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID

43320

Region 9

Tijuana River

Pollutant:	Synthetic Organics
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43320, Synthetic Organics

Region 9

Tijuana River

LOE ID:	4745
Pollutant:	Synthetic Organics
LOE Subgroup:	Pollutant-Water
Matrix:	Not Specified
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

43581

Region 9

Tijuana River

Pollutant:	Total Nitrogen as N
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Natural Sources Source Unknown Unknown Nonpoint Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.
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Two lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 17 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of 17 samples exceed the objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43581, Total Nitrogen as N
Tijuana River**

Region 9

LOE ID:	7384
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.
Temporal Representation:	The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.

Environmental Conditions:	The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 43581, Total Nitrogen as N	Region 9
Tijuana River	

LOE ID:	7383
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.
Temporal Representation:	Samples were collected two to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	44587	Region 9
Tijuana River		

Pollutant:	Trace Elements
Final Listing Decision:	List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44587, Trace Elements

Region 9

Tijuana River

LOE ID:	4667
Pollutant:	Trace Elements
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID

34451

Region 9

Tijuana River

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.</p>
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34451, Trash Tijuana River

Region 9

LOE ID:	4668
Pollutant:	Trash
LOE Subgroup:	Visual
Matrix:	Not Specified
Fraction:	Not Recorded
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pine Valley Creek \(Upper\)](#)
Water Body ID: CAR9114100020010924113027
Water Body Type: River & Stream

DECISION ID	33692	Region 9
Pine Valley Creek (Upper)		

Pollutant: Turbidity
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The original 2006 listing decision was based on data from the late 1990s. This data was evaluated in prior cycles without listing. In 2006 the data was incorrectly re-evaluated utilizing the objective of 5 NTU for groundwater. The appropriate NTU should have been 20 NTU for inland surface waters.

More recently sampling for the 2014 cycle had zero exceedances of the objective for one sampling event. For the more recent data:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 33692, Turbidity	Region 9
Pine Valley Creek (Upper)	

LOE ID: 3379

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 10
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Samples were collected at site NPC3C by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. Of 10 samples, 2 exceeded the WQO for municipal beneficial uses.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3C. The exact location of this site is unknown. Samples were collected at 4 other sites in the creek. The proximity of these sites to each other is unknown.
Temporal Representation:	Samples were collected monthly between 1/14/1998 to 8/18/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33692, Turbidity
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75358
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Upper) within the Tijuana Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 33692, Turbidity
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3381
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at site PVC1A by the City of San Diego Water Dept. from 1/14/1998 to 9/15/1998. Of 11 samples, 3 exceeded the WQO for municipal beneficial uses.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site PVC1A. The exact location of this site is unknown. Samples were collected at 4 other sites in the creek. The proximity of these sites to each other is unknown.
Temporal Representation:	Samples were collected monthly between 1/14/1998 and 9/15/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33692, Turbidity
Pine Valley Creek (Upper)

Region 9

LOE ID:	3377
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at site NPC3A by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. Of 10 samples, 1 exceeded the WQO for municipal beneficial uses.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site NPC3A. The exact location of this site is unknown. Samples were collected at 4 other sites in the creek. The proximity of these sites to each other is unknown.

Temporal Representation: Samples were collected monthly between 1/14/1998 and 8/18/1998.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33692, Turbidity
Pine Valley Creek (Upper)

Region 9

LOE ID: 3378

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 10
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Samples were collected at site NPC3B by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. Of 10 samples, 1 exceeded the WQO for municipal beneficial uses.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other beneficial uses, the WQO for turbidity is 20 ntu.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site NPC3B. The exact location of this site is unknown. Samples were collected at 4 other sites in the creek. The proximity of these sites to each other is unknown.

Temporal Representation: Samples were collected monthly between 1/14/1998 and 8/18/1998.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33692, Turbidity
Pine Valley Creek (Upper)

Region 9

LOE ID: 3412

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was collected at site PVC1B by the City of San Diego Water Dept. on May 20, 1997. The single sample was not in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters with all other beneficial uses, the WQO is 20 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at site PVC1B in Pine Valley Creek. Other samples were collected at PVC1A.
Temporal Representation:	One sample was collected on May 20, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33692, Turbidity

Region 9

Pine Valley Creek (Upper)

LOE ID:	3411
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at site PVC1A by the City of San Diego Water Dept. on May 19, 1997 and October 9, 1997. Two samples were collected (one on each day) and none were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters with all other beneficial uses, the WQO is 20 units.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site PVC1A. Another sample was collected at site PVC1B.
Temporal Representation:	Samples were collected once on each day on May 19, 1997 and October 9, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.

**Line of Evidence (LOE) for Decision ID 33692, Turbidity
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3380
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected at site NPC3D by the City of San Diego Water Dept. from 1/14/1998 to 7/14/1998. Of 9 samples, 4 exceeded the WQO for municipal beneficial uses.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for turbidity is 5 units. For inland surface waters and all other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3D. The exact location of this site is unknown. Samples were collected at 4 other sites in the creek. The proximity of these sites to each other is unknown.
Temporal Representation:	Samples were collected monthly between 1/14/1998 and 7/14/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 53306

Region 9

Pine Valley Creek (Upper)

Pollutant:	Alkalinity as CaCO₃
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>
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This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53306, Alkalinity as CaCO₃

Region 9

Pine Valley Creek (Upper)

LOE ID:	75367
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53307

Region 9

Pine Valley Creek (Upper)

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53307, Aluminum
Pine Valley Creek (Upper)**

Region 9

LOE ID: 75370

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aluminum.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.

Guideline Reference: [National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 53307, Aluminum

Region 9

Pine Valley Creek (Upper)

LOE ID: 75368

Pollutant: Aluminum

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).

Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

53308

Region 9

Pine Valley Creek (Upper)

Pollutant: Arsenic

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and

3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of one samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 1 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53308, Arsenic
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75390
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring

Temporal Representation:	site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Environmental Conditions:	Data was collected on a single day 5/6/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed.
	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53308, Arsenic

Region 9

Pine Valley Creek (Upper)

LOE ID:	75381
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53308, Arsenic

Region 9

Pine Valley Creek (Upper)

LOE ID:	75383
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	43722	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. See decision for lower Pine Valley for CSCI scores.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 43722, Benthic Community Effects		Region 9
Pine Valley Creek (Upper)		

LOE ID:	72759
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The sample collected had an IBI score above 40.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at Pine Valley Creek below Noble Cyn. Cr..
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43722, Benthic Community Effects
Pine Valley Creek (Upper)

Region 9

LOE ID:	26438
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from May 2001 to 2007 at one sampling site. Of the total number of samples, one sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data Southern California Postfire Study. Index of Biotic Integrity. 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 911NPCNCx on Pine Valley Creek (Upper).
Temporal Representation:	Sampling occurred during four events from May 2001 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure

Line of Evidence (LOE) for Decision ID 43722, Benthic Community Effects

Region 9

Pine Valley Creek (Upper)

LOE ID:	75391
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores for this water body were both above 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams.

Spatial Representation: Samples were collected at the following station: 911TJNPC2-North Pine Creek (NPCNC).
 Temporal Representation: Surveys done June 5, 2007.
 Environmental Conditions:
 QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
 QAPP Information Reference(s):

DECISION ID	53309	Region 9
Pine Valley Creek (Upper)		

Pollutant: Bifenthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53309, Bifenthrin	Region 9
Pine Valley Creek (Upper)	

LOE ID: 75393

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53310	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 1 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (sediment) and zero of 1 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53310, Cadmium

Region 9

Pine Valley Creek (Upper)

LOE ID:	75395
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53310, Cadmium

Region 9

Pine Valley Creek (Upper)

LOE ID:	75408
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53310, Cadmium

Region 9

Pine Valley Creek (Upper)

LOE ID:	75407
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53311	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53311, Chloride	Region 9
Pine Valley Creek (Upper)	

LOE ID:	75412
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists

Objective/Criterion Reference:	objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Upper) within the Tijuana Hydrologic Unit is 250 mg/L. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53311, Chloride

Region 9

Pine Valley Creek (Upper)

LOE ID:	75410
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53312

Region 9

Pine Valley Creek (Upper)

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 1 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 1 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53312, Chromium**Region 9****Pine Valley Creek (Upper)**

LOE ID:	75421
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for

Guideline Reference:	sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53312, Chromium

Region 9

Pine Valley Creek (Upper)

LOE ID:	75424
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53312, Chromium

Region 9

Pine Valley Creek (Upper)

LOE ID:	75423
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Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53313	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 1 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 1 samples (water) exceeded the guideline/objective, and

this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53313, Copper
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75436
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53313, Copper
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75437
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53313, Copper

Region 9

Pine Valley Creek (Upper)

LOE ID:	75434
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Data was collected on a single day 5/6/2009.
Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	53314	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53314, Cyfluthrin	Region 9
Pine Valley Creek (Upper)	

LOE ID:	75449
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for

Data Reference:	Cyfluthrin, total. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53315	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53315, Cyhalothrin, Lambda	Region 9
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Pine Valley Creek (Upper)

LOE ID:	75451
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53316	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53316, Cypermethrin
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75453
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53317

Region 9

Pine Valley Creek (Upper)

Pollutant: Deltamethrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53317, Deltamethrin
Pine Valley Creek (Upper)**

Region 9

LOE ID: 75465

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.

Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53318	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53318, Esfenvalerate/Fenvalerate	Region 9
Pine Valley Creek (Upper)	

LOE ID:	75468
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53319	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53319, Fenpropathrin	Region 9
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Pine Valley Creek (Upper)

LOE ID:	75470
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53320	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
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2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53320, Iron
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75264
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53320, Iron
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75265
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Upper) within the Tijuana Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID		53321	Region 9
Pine Valley Creek (Upper)			
Pollutant:	Lead		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	New Decision		
Revision Status	Revised		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 1 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample (sediment) and zero of 1 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available 		

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53321, Lead
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75267
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53321, Lead
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75278
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 53322		Region 9
Pine Valley Creek (Upper)		
Pollutant:	Manganese	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 53322, Manganese**Region 9****Pine Valley Creek (Upper)**

LOE ID:	75281
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Upper) within the Tijuana Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53322, Manganese**Region 9****Pine Valley Creek (Upper)**

LOE ID:	75280
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53323	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 1 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 1 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53323, Nickel	Region 9
Pine Valley Creek (Upper)	

LOE ID:	75296
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53323, Nickel
Pine Valley Creek (Upper)

Region 9

LOE ID:	75283
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53323, Nickel

Region 9

Pine Valley Creek (Upper)

LOE ID:	75295
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

53324

Region 9

Pine Valley Creek (Upper)

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53324, Nitrate/Nitrite (Nitrite + Nitrate as N)
Pine Valley Creek (Upper)

Region 9

LOE ID: 75297

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	33181	Region 9
Pine Valley Creek (Upper)		

Pollutant: Nitrite as Nitrite NO2
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33181, Nitrite as Nitrite NO2	Region 9
Pine Valley Creek (Upper)	

LOE ID: 3410

Pollutant: Nitrite as Nitrite NO2
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at site PCV1B by the City of San Diego Water Dept. on May 20, 1997. One sample was collected and it was not in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nitrite (as N) is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample was collected at site PVC1B in Pine Valley Creek. Other samples were collected from site PVC1A.
Temporal Representation:	The sample was collected on May 20, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33181, Nitrite as Nitrite NO2

Region 9

Pine Valley Creek (Upper)

LOE ID:	75298
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33181, Nitrite as Nitrite NO2

Region 9

Pine Valley Creek (Upper)

LOE ID:	3409
Pollutant:	Nitrite as Nitrite NO2
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nitrite samples were collected at site PVC1A by the City of San Diego Water Dept. on May 19, 1997 and October 9, 1997. One sample was collected on each date, giving a total of 2 samples. There were no exceedances of 2 samples. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Nitrite (as N) is 1.0 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at sample site PVC1A in Pine Valley Creek. Samples were also collected at PVC1B.
Temporal Representation:	One sample was collected on May 19, 1997 and one was collected on October 9, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	53325	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53325, Nitrogen, Nitrite
Pine Valley Creek (Upper)**

Region 9

LOE ID: 75298

Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**DECISION ID 53327
Pine Valley Creek (Upper)**

Region 9

Pollutant: Nitrogen, ammonia (Total Ammonia)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53327, Nitrogen, ammonia (Total Ammonia)
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75378
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia ' Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53327, Nitrogen, ammonia (Total Ammonia)
Pine Valley Creek (Upper)**

Region 9

LOE ID: 75379

Pollutant: Nitrogen, ammonia (Total Ammonia)
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	33115	Region 9
Pine Valley Creek (Upper)		

Pollutant: Oxygen, Dissolved

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

10 lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 26 samples exceed the Objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3390
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site SPC2 by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 2 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SPC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 10am on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3388
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site PVC2 by the City of San Diego Water Dept. on March 19, 1997. Multiple samples were taken within 1 hour. For data assessment, an average was calculated for these samples. The average of 6 samples was taken for March 19. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site PVC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected on March 19, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved Pine Valley Creek (Upper)

Region 9

LOE ID:	3383
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3B by the City of San Diego Water Dept. on March 13 and March 31, 1997. Multiple samples were collected within 5 minutes. For data assessment, an average was calculated for these samples. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site NPC3B in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation: Samples were collected on March 13 and March 31, 1997.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved
Pine Valley Creek (Upper)

Region 9

LOE ID: 3384

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at sample site NPC3C by the City of San Diego Water Dept. on January 1, 1997 and March 31, 1997. On each date, multiple samples were taken within 20 minutes. For data assessment, an average was calculated for these samples on each day. The average of 5 samples was taken for Jan. 1, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site NPC3C in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation: Samples were collected around 11am on January 1, 1997 and March 31, 1997.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved
Pine Valley Creek (Upper)

Region 9

LOE ID: 3385

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3D by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 2 minutes. For data assessment, an average was calculated for these samples on each day. The average of 3 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3D in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 10am on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3389
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC2 by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 6 samples was taken for March 13, and an average of 3 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site NPC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation: Samples were collected around noon and 1pm on March 13, 1997 and March 31, 1997.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved
Pine Valley Creek (Upper)

Region 9

LOE ID: 3386

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at sample site PVC1A by the City of San Diego Water Dept. on 4 days between March 1997 and October 1997. On each date, multiple samples were taken within an hour. For data assessment, an average was calculated for these samples on each day. The number of samples for each day ranged from 4 to 7. None of the samples or averages were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site PVC1A in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation: Samples were collected from March 13, 1997 to October 9, 1997.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved
Pine Valley Creek (Upper)

Region 9

LOE ID: 3387

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site PVC1B by the City of San Diego Water Dept. on February 19, 1997 and May 20, 1997. On each date, multiple samples were taken in approximately 1 hour. For data assessment, an average was calculated for these samples on each day. The average of 8 samples was taken for February 19, and an average of 4 samples was calculated for May 20. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site PVC1B in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected in the morning on February 19, 1997 and May 20, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved Pine Valley Creek (Upper)

Region 9

LOE ID:	75300
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation:

Data was collected on a single day 5/6/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33115, Oxygen, Dissolved

Region 9

Pine Valley Creek (Upper)

LOE ID: 3382

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data was collected at sample site NPC3A by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 5 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at site NPC3A in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation:

Samples were collected on March 13, 1997 and March 31, 1997.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID 53328

Region 9

Pine Valley Creek (Upper)

Pollutant: Permethrin, total

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Pollution:

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 53328, Permethrin, total
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75313
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	32840	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being re-considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Six of 51 of samples exceeded the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used does not satisfy the data quality requirements of section 6.1.4 of the Policy. The data was collected in the later 1990s and information required under 6.1.4 of the Policy is not available.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 51 of samples exceeded the water quality objective for phosphorus. and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, additional data and information is available indicating that standards are met: Historic site visits by the San Diego Water Board stormwater staff were conducted to educate property owners regarding dumping of horse manure into the creek.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32840, Phosphorus	Region 9
Pine Valley Creek (Upper)	

LOE ID:	3372
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. At site NPC3B, 2 of 10 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Phosphorus samples for this LOE were collected at site NPC3B. The exact location of this site is unknown. Samples were collected at 4 other sample sites in Pine Valley Creek. The proximity of the sites to each other is unknown.
Temporal Representation:	Samples were collected monthly from 1/14/1998 to 8/18/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 32840, Phosphorus
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3373
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. At site NPC3C, 0 of 10 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Phosphorus samples for this LOE were collected at site NPC3C. The exact location of this site is unknown. Samples were collected at 4 other sample sites in Pine Valley Creek. The proximity of the sites to each other is unknown.
Temporal Representation:	Samples were collected on a monthly basis from 1/14/1998 to 8/18/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32840, Phosphorus

Region 9

Pine Valley Creek (Upper)

LOE ID:	3374
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. At site NPC3D, 1 of 10 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Phosphorus samples for this LOE were collected at site NPC3D. The exact location of this site is unknown. Samples were collected at 4 other sample sites in Pine Valley Creek. The proximity of the sites to each other is unknown.
Temporal Representation:	Samples were collected on a monthly basis from 1/14/1998 to 8/18/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32840, Phosphorus

Region 9

Pine Valley Creek (Upper)

LOE ID:	3375
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 9/15/1998. At site PVC1A, 2 of 11 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters and for all

Objective/Criterion Reference:	beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time. Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Phosphorus samples for this LOE were collected at site PVC1A. The exact location of this site is unknown. Samples were collected at 4 other sample sites in Pine Valley Creek. The proximity of the sites to each other is unknown.
Temporal Representation:	Samples were collected on a monthly basis from 1/14/1998 to 9/15/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 32840, Phosphorus
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3371
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Phosphorus data was collected at 5 sample sites by the City of San Diego Water Dept. from 1/14/1998 to 8/18/1998. At site NPC3A, 1 of 10 samples was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters-streams and other flowing waters and for all beneficial uses, the WQO for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Use unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.
Guideline Reference:	Certain exceptions to these objectives are described in Chapter 4 of the Basin Plan in the sections titled "Discharges to Coastal Lagoons from Pilot Water Reclamation Projects" and "Discharges to Inland Surface Waters". Placeholder reference 2006 303(d)
Spatial Representation:	Samples for this LOE were collected at site NPC3A in Pine Valley Creek. The exact location of this site is unknown. Samples were collected at 4 more sample sites in Pine Valley Creek.
Temporal Representation:	Samples were collected monthly from January 14, 1998 to August 18, 1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

53329

Region 9

Pine Valley Creek (Upper)

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53329, Selenium

Region 9

Pine Valley Creek (Upper)

LOE ID: 75317

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L.
Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 53329, Selenium

Region 9

Pine Valley Creek (Upper)

LOE ID: 75318

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 53330

Region 9

Pine Valley Creek (Upper)

Pollutant: Silver

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53330, Silver
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75331
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53330, Silver
Pine Valley Creek (Upper)**

Region 9

LOE ID: 75329

Pollutant: Silver
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).

Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**DECISION ID 53331
Pine Valley Creek (Upper)**

Region 9

Pollutant: Specific Conductivity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53331, Specific Conductivity
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75332
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 53332
Pine Valley Creek (Upper)**

Region 9

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53332, Sulfates
Pine Valley Creek (Upper)

Region 9

LOE ID:	75333
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 53332, Sulfates

Region 9

Pine Valley Creek (Upper)

LOE ID: 75345

Pollutant: Sulfates
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Upper) within the Tijuana Hydrologic Unit is 250 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 53333

Region 9

Pine Valley Creek (Upper)

Pollutant: Temperature, water
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the criteria. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating per Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, additional data and information is available indicating that standards may be met. Two additional lines of evidence are available.

First, the location of the sampling and timing may not be representative of steelhead habitat utilization in San Mateo, and samples were taken as grabs. Critical information needed to assess temperatures for steelhead include growth periods (spring and fall) as well as summer daytime maximums in documented oversummering habitat.

Second, the criteria of 21 degrees as a limit is not necessarily applicable to southern California steelhead, which have been shown to have higher temperature tolerance. See Spina Environ Biol Fish (2007) 80:23Å–34.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53333, Temperature, water
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75346
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Å°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33167	Region 9
Pine Valley Creek (Upper)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 52 samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 52 samples exceed the objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids	Region 9
Pine Valley Creek (Upper)	

LOE ID:	3402
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Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved

Beneficial Use:	Municipal & Domestic Supply
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Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3C by the City of San Diego Water Dept. on January 1, 1997 and March 31, 1997. On each date, multiple samples were taken within 20 minutes. For data assessment, an average was calculated for these samples on each day. The average of 5 samples was taken for Jan. 1, and an average of 4 samples was calculated for

Data Reference:	March 31. None of the samples or averages were in exceedance. (SWRCB, 2003). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3C in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 11am on January 1, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3401
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3B by the City of San Diego Water Dept. on March 13 and March 31, 1997. Multiple samples were collected within 5 minutes. For data assessment, an average was calculated for these samples. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3B in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected between 10am and noon on March 13 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3403
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3D by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 2 minutes. For data assessment, an average was calculated for these samples on each day. The average of 3 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	Samples were collected at site NPC3D in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Environmental Conditions:	Samples were collected around 10am on March 13, 1997 and March 31, 1997.
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75347
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that

Objective/Criterion Reference:	adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)

Region 9

LOE ID:	3404
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site PVC1A by the City of San Diego Water Dept. on 4 days between March 1997 and October 1997. On each date, multiple samples were taken within an hour. For data assessment, an average was calculated for these samples on each day. The number of samples for each day ranged from 4 to 7. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site PVC1A in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around between 8:45am and 2:12pm from March 13, 1997 to October 9, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)

Region 9

LOE ID:	3400
Pollutant:	Total Dissolved Solids

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3A by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 5 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3A in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 11am and noon on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75349
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Upper) within the Tijuana Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation: Data was collected on a single day 5/6/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)

Region 9

LOE ID: 3405

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data was collected at sample site PVC1B by the City of San Diego Water Dept. on February 19, 1997 and May 20, 1997. On each date, multiple samples were taken in approximately 1 hour. For data assessment, an average was calculated for these samples on each day. The average of 8 samples was taken for February 19, and an average of 4 samples was calculated for May 20. None of the samples or averages were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at site PVC1B in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation: Samples were collected in the morning on February 19, 1997 and May 20, 1997.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)

Region 9

LOE ID: 3408

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site SPC2 by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 2 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SPC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 10am on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids
Pine Valley Creek (Upper)

Region 9

LOE ID:	3407
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC2 by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 6 samples was taken for March 13, and an average of 3 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at site NPC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation: Samples were collected around noon and 1pm on March 13, 1997 and March 31, 1997.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids

Region 9

Pine Valley Creek (Upper)

LOE ID: 3406

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Data was collected at sample site PVC2 by the City of San Diego Water Dept. on March 19, 1997. Multiple samples were taken within 1 hour. For data assessment, an average was calculated for these samples. The average of 6 samples was taken for March 19. None of the samples or averages were in exceedance. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at site PVC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation: Samples were collected around 10am on March 19, 1997.

Environmental Conditions:

QAPP Information: Data used in 2002 assessment.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33167, Total Dissolved Solids

Region 9

Pine Valley Creek (Upper)

LOE ID: 3376

Pollutant: Total Dissolved Solids

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 51

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	TDS data was collected at 5 sites in Pine Valley Creek by the City of San Diego Water Dept. from 1/14/1998 to 9/15/1998. There were no exceedances at any of the sites. A total of 51 samples were collected; 10 at all sites, except PVC1A, where 11 samples were collected. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for total dissolved solids is 500. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 5 sites in Pine Valley Creek. These samples are labeled NPC3A-D, and PVC1A. The locations of these sites and distances from each other are unknown.
Temporal Representation:	Samples were collected on a monthly basis from 1/14/1998 to 9/15/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 53334		Region 9
Pine Valley Creek (Upper)		
Pollutant:	Toxicity	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Pine Valley Creek (Upper)

LOE ID:	75350
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 911S01818.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID 53335

Region 9

Pine Valley Creek (Upper)

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity

to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of 1 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of 1 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53335, Zinc
Pine Valley Creek (Upper)**

Region 9

LOE ID:	75372
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 53335, Zinc

Region 9

Pine Valley Creek (Upper)

LOE ID: 75360

Pollutant: Zinc
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 53335, Zinc

Region 9

Pine Valley Creek (Upper)

LOE ID: 75361

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33116	Region 9
Pine Valley Creek (Upper)		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 20 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 33116, pH	Region 9
Pine Valley Creek (Upper)	

LOE ID:	3391
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3A by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 5 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3A in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 11am and noon on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33116, pH
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3395
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site PVC1A by the City of San Diego Water Dept. on 4 days between March 1997 and October 1997. On each date, multiple samples were taken within an hour. For data assessment, an average was calculated for these samples on each day. The number of samples for each day ranged from 4 to 7. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at site PVC1A in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation:

Samples were collected around between 8:45am and 2:12pm from March 13, 1997 to October 9, 1997.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33116, pH
Pine Valley Creek (Upper)**

Region 9

LOE ID: 3396

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type:
Data Used to Assess Water Quality:

PHYSICAL/CHEMICAL MONITORING
Data was collected at sample site PVC1B by the City of San Diego Water Dept. on February 19, 1997 and May 20, 1997. On each date, multiple samples were taken in approximately 1 hour. For data assessment, an average was calculated for these samples on each day. The average of 8 samples was taken for February 19, and an average of 4 samples was calculated for May 20. None of the samples or averages were in exceedance. (SWRCB, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at site PVC1B in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation:

Samples were collected in the morning on February 19, 1997 and May 20, 1997.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33116, pH
Pine Valley Creek (Upper)**

Region 9

LOE ID: 3394

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3D by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 2 minutes. For data assessment, an average was calculated for these samples on each day. The average of 3 samples was taken for March 13, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3D in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 10am on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33116, pH

Region 9

Pine Valley Creek (Upper)

LOE ID:	3393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3C by the City of San Diego Water Dept. on January 1, 1997 and March 31, 1997. On each date, multiple samples were taken within 20 minutes. For data assessment, an average was calculated for these samples on each day. The average of 5 samples was taken for Jan. 1, and an average of 4 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3C in Pine Valley Creek. Samples were also collected

Temporal Representation: from 8 other sites along Pine Valley Creek.
 Environmental Conditions: Samples were collected around 11am on January 1, 1997 and March 31, 1997.
 QAPP Information: Data used in 2002 assessment.
 QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 33116, pH
 Pine Valley Creek (Upper)**

Region 9

LOE ID: 75315

Pollutant: pH
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Upper) was collected at 1 monitoring site [Pine Valley Creek below Noble Cyn. Cr. - 911S01818]

Temporal Representation: Data was collected on a single day 5/6/2009.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 33116, pH
 Pine Valley Creek (Upper)**

Region 9

LOE ID: 3399

Pollutant: pH
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Data was collected at sample site SPC2 by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 2 samples was taken for March 13, and an average of 4 samples was calculated for

Data Reference:	March 31. None of the samples or averages were in exceedance. (SWRCB, 2003). Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site SPC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around 10am on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33116, pH Pine Valley Creek (Upper)

Region 9

LOE ID:	3398
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC2 by the City of San Diego Water Dept. on March 13, 1997 and March 31, 1997. On each date, multiple samples were taken within 5 minutes. For data assessment, an average was calculated for these samples on each day. The average of 6 samples was taken for March 13, and an average of 3 samples was calculated for March 31. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected around noon and 1pm on March 13, 1997 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33116, pH Pine Valley Creek (Upper)

Region 9

LOE ID:	3392
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site NPC3B by the City of San Diego Water Dept. on March 13 and March 31, 1997. Multiple samples were collected within 5 minutes. For data assessment, an average was calculated for these samples. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site NPC3B in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.
Temporal Representation:	Samples were collected between 10am and noon on March 13 and March 31, 1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 33116, pH
Pine Valley Creek (Upper)**

Region 9

LOE ID:	3397
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data was collected at sample site PVC2 by the City of San Diego Water Dept. on March 19, 1997. Multiple samples were taken within 1 hour. For data assessment, an average was calculated for these samples. The average of 6 samples was taken for March 19. None of the samples or averages were in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at site PVC2 in Pine Valley Creek. Samples were also collected from 8 other sites along Pine Valley Creek.

Temporal Representation:

Samples were collected around 10am on March 19, 1997.

Environmental Conditions:

QAPP Information:

Data used in 2002 assessment.

QAPP Information Reference(s):

DECISION ID	34185	Region 9
Pine Valley Creek (Upper)		

Pollutant:
Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Reason for Delisting:
Impairment from Pollutant or Pollution:

Indicator Bacteria
Delist from 303(d) list (TMDL required list)
Delist from 303(d) list (TMDL required list)(2012)
Original
Applicable WQS attained; reason for recovery unspecified
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Fourteen of samples exceeded the water quality objective for enterococcus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of 87 samples exceeded the enterococcus water quality objective and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34185, Indicator Bacteria	Region 9
Pine Valley Creek (Upper)	

LOE ID:
Pollutant:
LOE Subgroup:
Matrix:
Fraction:
Beneficial Use:

29790
Enterococcus
Pollutant-Water
Water
None
Non-Contact Recreation

Number of Samples:	87
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Samples were collected by the City of San Diego from January 1998 through February 2008. Fourteen of 87 samples exceeded the freshwater water quality objective.
Data Reference:	Pine Valley Creek Monitoring Data, 1998 - 2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Freshwater enterococci maximum for infrequently used areas is 151 colonies per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at one station on Cottonwood Pine Valley Creek 0.25 miles upstream. Station ID is PVC1a
Temporal Representation:	Samples were collected January 1998 through February 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected in accordance with the City of San Diego Water Quality Laboratory's quality assurance plan.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

Line of Evidence (LOE) for Decision ID 34185, Indicator Bacteria

Region 9

Pine Valley Creek (Upper)

LOE ID:	4692
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Noble Canyon Creek](#)
Water Body ID: CAR9114100020011025125948
Water Body Type: River & Stream

DECISION ID	43712	Region 9
Noble Canyon Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this indicator. 4 of 5 samples exceeded the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 4 of 5 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2. AND no indicator pollutants are available.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43712, Benthic Community Effects	Region 9
Noble Canyon Creek	

LOE ID: 74450
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body is 39 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 911NCPCRx-Nobel Creek (NCPCR).
Temporal Representation:	Surveys done June 5, 2007.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43712, Benthic Community Effects

Region 9

Noble Canyon Creek

LOE ID:	26546
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from May 2001 to 2007 at one sampling site. Of the total number of samples, three of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI

Guideline Reference:	score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9) A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 911NCPCR _x on Noble Canyon Creek.
Temporal Representation:	Sampling occurred during four events from May 2001 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID 42799		Region 9
Noble Canyon Creek		
Pollutant:	Oxygen, Dissolved	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Basin Plan water quality objective for dissolved oxygen.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. Four samples were not used due to temporal representation, section 6.1.5.3. 3. None of the 8 samples exceed the Basin Plan water quality objective for dissolved oxygen and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 42799, Oxygen, Dissolved		Region 9
Noble Canyon Creek		

LOE ID: 3413

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 03/1997. Five samples were collected within 3 minutes on 3/13, 4 samples were collected within 3 minutes on 3/18 and 3 samples were collected within 1 minute on 3/31. Neither the average of the measured DO concentrations, nor each individual concentration was in exceedance. (SWRCB, 2003)
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Noble Canyon Creek station NOB2.
Temporal Representation:	Samples were collected on 03/13/1997, 3/18/1997, and 3/31/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID	33635	Region 9
Noble Canyon Creek		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 12 samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 12 samples exceed the Basin Plan water quality objective for total dissolved solids and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33635, Total Dissolved Solids

Region 9

Noble Canyon Creek

LOE ID:	3415
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. For all 12 samples, neither the average of the samples, nor each individual sample was in exceedance.(SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Noble Canyon Creek site NOB2.
Temporal Representation:	Samples were collected on 03/13/1997, 03/18/1997, and 3/31/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

42682

Region 9

Noble Canyon Creek

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 12 samples exceed the Basin Plan water quality objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 12 samples exceed the Basin Plan water quality objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42682, pH

Region 9

Noble Canyon Creek

LOE ID:	3414
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. For all 12 samples, neither the average of the samples, nor each of the actual samples was in exceedance. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Noble Canyon Creek at station NOB2.
Temporal Representation:	Samples were collected on 03/13/1997, on 3/18/1997, and 03/31/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Kitchen Creek](#)
Water Body ID: CAR9116000020011025105327
Water Body Type: River & Stream

DECISION ID	43839	Region 9
Kitchen Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 43839, Benthic Community Effects	Region 9
Kitchen Creek	

LOE ID: 26407
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken on May 2001 at one sampling site. None of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 911KCKCRx on Kitchen Creek.
Temporal Representation:	Sampling occurred during two events on May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43839, Benthic Community Effects

Region 9

Kitchen Creek

LOE ID:	79686
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One samples was taken at one station on Kitchen Creek. The CSCI score was above the 0.79 threshold, and therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 911TJKCT5
Temporal Representation:	Surveys done in 2008
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008

Line of Evidence (LOE) for Decision ID 43839, Benthic Community Effects

Region 9

Kitchen Creek

LOE ID:	74040
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was over 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13

Spatial Representation:	Samples were collected at the following station: 911TJKTC5 (Kitchen Creek 5).
Temporal Representation:	Surveys done May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43839, Benthic Community Effects	Region 9
Kitchen Creek	

LOE ID:	3423
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Subgroup Missing
Matrix:	-N/A
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected by the Stream Team in 1998. Taxa richness was 17 during both seasons. EPT taxa were 7 in Spring and 9 in Fall. EPT index was 57.8 in Spring and 65.9 in Fall. The tolerance value was 3.3 and 3.9. There appeared to be a good balance of all 5 types of feeding groups during both sampling periods. (Stream Team, 2001).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kitchen Creel site KTC2.
Temporal Representation:	Samples were collected in Spring and Fall of 1998.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43839, Benthic Community Effects	Region 9
Kitchen Creek	

LOE ID:	3422
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Subgroup Missing
Matrix:	-N/A
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	134
Number of Exceedances:	
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Data were collected by the City of San Diego. The data summary is as follows: Total

Specimens: 134, EPT Index: 8, Total Ephemeroptera: 35, Total Plecoptera: 4, Total Tricoptera: 82, Total Diptera:13. (SDRWQCB, 2002m).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Kitchen Creek. Exact location was not reported.
Temporal Representation: Temporal representation was not reported. However, other data in the dataset is from 1997.
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

DECISION ID	32527	Region 9
Kitchen Creek		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 28 samples from two combined lines of evidence exceeded the dissolved oxygen Basin Plan water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.
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Line of Evidence (LOE) for Decision ID 32527, Oxygen, Dissolved	Region 9
Kitchen Creek	

LOE ID:	3416
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997. None of the 8 samples were in exceedance of any of the above standards. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a WARM beneficial use, the WQO for Dissolved Oxygen is a minimum of 5.0 mg/L. For COLD beneficial uses, the WQO is 6.0 mg/L and for all other beneficial uses, the WQO is 7.0 mg/L. For inland surface waters and all beneficial uses, the WQO of 7.0 mg/L is the annual mean concentration not to be less than this more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kitchen Creek site KTC2.
Temporal Representation:	Samples were collected on 03/12/1997 and 06/18/1997. In 03/1997, 3 samples were collected over a period of 6 minutes in the morning and in 06/1997, 5 samples were collected over a period of 3 minutes in the morning.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32527, Oxygen, Dissolved Kitchen Creek

Region 9

LOE ID:	3417
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 1998. None of the 21 samples were in exceedance. (SWRCB, 2003)
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a WARM beneficial use, the WQO for Dissolved Oxygen is a minimum of 5.0 mg/L. For COLD beneficial uses, the WQO is 6.0 mg/L and for all other beneficial uses, the WQO is 7.0 mg/L. For inland surface waters and all beneficial uses, the WQO of 7.0 mg/L is the annual mean concentration not to be less than this more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:

Samples were collected at Kitchen Creek site KTC5.
Samples were collected on 01/01/1997, 04/01/1997, 05/19/1997, 06/18/1997, and 01/29/1998. For all sampling days, 3-5 samples were collected over the course of 30 minutes or less in the morning, or early afternoon.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	43323	Region 9
Kitchen Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for listing on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 29 samples from two combined lines of evidence exceeded the 6 - 8.5 pH Basin Plan water quality objective and this does not exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43323, pH	Region 9
Kitchen Creek	

LOE ID:	3419
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego in 1997 and 1998. Five of the 21 samples were in exceedance. Since all 5 exceedances occurred on one day, 05/19/1997, it is averaged as one exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kitchen Creek at site KTC5.
Temporal Representation:	Samples were collected on 01/01/1997, 04/01/1997, 05/19/1997, 06/18/1997, and 01/29/1998.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43323, pH Kitchen Creek

Region 9

LOE ID:	3418
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997. None of the 8 samples were in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kitchen Creek site KTC2.
Temporal Representation:	Samples were collected 3-5 times over a period of 6 minutes or less on 03/12/1997 and 06/18/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID 35501

Region 9

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the 24 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 29 samples exceeded the 500 mg/L TDS Basin Plan water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 35501, Total Dissolved Solids
Kitchen Creek

Region 9

LOE ID:	3421
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 1998. Four of the 21 samples were in exceedance. All 4 samples were collected on 01/29/1998. (SWRCB, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Kitchen Creek site KTC5.
Temporal Representation: Samples were collected on 01/01/1997, 04/01/1997, 05/19/1997, 06/18/1997, and 01/29/1998. Samples were collected 3-5 times over a 30 minutes period in the morning or early afternoon.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 35501, Total Dissolved Solids
Kitchen Creek

Region 9

LOE ID: 3420

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept in 1997. None of the 8 samples were in exceedance. (SWRCB, 2003).
Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Kitchen Creek site KTC2
Temporal Representation: Samples were collected on 03/12/1997 and 06/18/1997. Three to five samples were collected on each day over a 6 minute period in the morning.
Environmental Conditions:
QAPP Information: Data used in 2002 assessment.
QAPP Information Reference(s):

DECISION ID 33469
Kitchen Creek

Region 9

Pollutant: Turbidity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. No samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

4. It cannot be determine if the data quality requirements of section 6.1.4 of the Policy are satisfied due to the absence of the information.

5. The data used does not satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The one sample did not exceed the 5 NTU water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33469, Turbidity

Region 9

Kitchen Creek

LOE ID:	3424
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997. None of 1 sample was in exceedance.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a municipal beneficial use, the WQO for Turbidity is 5 ntu. For other beneficial uses, the WQO for turbidity is 20 ntu.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Kitchen Creek at site KTC5.
Temporal Representation:	One sample was collected on 05/19/1997.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Cottonwood Creek \(Tijuana River watershed\)](#)
Water Body ID: CAR9116000020020306143545
Water Body Type: River & Stream

DECISION ID	42288	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant: Selenium
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess pollutant. Three of three samples exceeded the aquatic life objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of three samples exceeded the objective, and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42288, Selenium	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID: 73411
Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42288, Selenium

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID:	21199
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two water samples were collected at Cottonwood Creek 10, station 911TCWD10 on June 2005, and April 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Cottonwood Creek station 2, 911TCWD10.
Temporal Representation:	Samples were collected on June 2005, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

Line of Evidence (LOE) for Decision ID 42288, Selenium**Region 9****Cottonwood Creek (Tijuana River watershed)**

LOE ID: 73412

Pollutant: Selenium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Maximum Contaminant Level for selenium in the Basin Plan is 0.05 mg/L.

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)**DECISION ID 47221****Region 9****Cottonwood Creek (Tijuana River watershed)**

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 one line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the National Recommended Water Quality Criteria, 2009.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47221, Alkalinity as CaCO₃

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID:	73351
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47223

Region 9

Cottonwood Creek (Tijuana River watershed)

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceeded the criteria for aquatic life beneficial uses, and zero of one sample exceeded the objective for the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criteria/objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47223, Aluminum
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID: 73354

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87

Guideline Reference:	ug/L. National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47223, Aluminum	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73353
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47223, Aluminum	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73352
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47224	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) exceeded the evaluation guideline and zero of two samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of two samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47224, Arsenic
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73360
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47224, Arsenic
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73362
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	43573	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 43573, Benthic Community Effects
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	26380
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twelve samples of IBI data were taken from December 1999 to 2007 at two sampling sites. Of the total number of samples, two samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 911CCH80x and 911MCCBML on Cottonwood Creek.
Temporal Representation:	Sampling occurred during nine events from December 1999 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43573, Benthic Community Effects
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	26700
Pollutant:	Benthic Community Effects

LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three samples of IBI data were taken from May 2001 to May 2002 at one sampling site. All three samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: CC-E on Cottonwood Creek.
Temporal Representation:	Sampling occurred during three events from May 2001 to May 2002.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 43573, Benthic Community Effects
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	79689
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was collected at one station on Cottonwood Creek (911HU). The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Region 9 CSCI Scores & Water Body Information

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The sample station: 911S04086
Temporal Representation:	The sample was collected 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	e-mail clarifying QAPP information RWB9 Stormwater Monitoring Council CY 2009

Line of Evidence (LOE) for Decision ID 43573, Benthic Community Effects
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73363
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are

converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions. The dataset uses the old 0-70 IBI scoring.

Guideline Reference:

Spatial Representation:

The sample was collected at station REF-CWC, Cottonwood Creek.

Temporal Representation:

The sample was collected in May 2010.

Environmental Conditions:

QAPP Information:

The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 43573, Benthic Community Effects

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID: 21199

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality: Two water samples were collected at Cottonwood Creek 10, station 911TCWD10 on June 2005, and April 2006.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Water samples were collected at Cottonwood Creek station 2, 911TCWD10.

Temporal Representation:

Samples were collected on June 2005, and April 2006.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID 47225

Region 9

Cottonwood Creek (Tijuana River watershed)

Pollutant: Bifenthrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47225, Bifenthrin**Region 9****Cottonwood Creek (Tijuana River watershed)**

LOE ID:	73365
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47229	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of seven samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of seven samples (water) exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47229, Cadmium	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73367
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47229, Cadmium

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID:	73372
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47229, Cadmium
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73371
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47229, Cadmium
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73370
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47229, Cadmium

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID:	73369
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47226
Cottonwood Creek (Tijuana River watershed)

Region 9

Pollutant: Chloride
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47226, Chloride
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73375

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47226, Chloride

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID:	73376
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Cottonwood Creek (Tijuana River watershed) within the Tijuana Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47230

Region 9

Cottonwood Creek (Tijuana River watershed)

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47230, Chlorpyrifos
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID: 73377

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).

Guideline Reference: [Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho](#)

[Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response, CA Department of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]

Temporal Representation: Data was collected over the time period 5/2/2006-6/2/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47230, Chlorpyrifos
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 78011

Pollutant: Chlorpyrifos

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]

Temporal Representation: Data was collected over the time period 5/2/2006-6/2/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 47255
Cottonwood Creek (Tijuana River watershed)

Region 9

Pollutant: Chromium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of one sample (water) exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of one sample (water) exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47255, Chromium
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73381
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47255, Chromium

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID: 73379

Pollutant: Chromium

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47255, Chromium

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID: 73382

Pollutant: Chromium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47256	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary, and under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of seven samples (water) exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of seven samples (water) exceeded the criteria, and this

sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47256, Copper
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73387
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47256, Copper
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73386
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47256, Copper
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73384
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected

Temporal Representation: at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Environmental Conditions: Data was collected on a single day 5/6/2009.
QAPP Information: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s): The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47256, Copper
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73388

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]

Temporal Representation: Data was collected 5/28/2003 - 6/2/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47256, Copper
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73389

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47257	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 47257, Cyfluthrin
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73391
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47258**

Region 9

Cottonwood Creek (Tijuana River watershed)

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one

sample exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47258, Cyhalothrin, Lambda
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73393
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47259, Cypermethrin	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73304
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

Objective/Criterion Reference:	life (Water Quality Control Plan for the San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47260	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47260, Deltamethrin	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73306
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47261	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47261, Diazinon
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	78009
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 47261, Diazinon
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73307
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47262	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

**Line of Evidence (LOE) for Decision ID 47262, Esfenvalerate/Fenvalerate
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73313
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47263

Region 9

Cottonwood Creek (Tijuana River watershed)

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47263, Fenpropathrin Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73315
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47265 Cottonwood Creek (Tijuana River watershed)

Region 9

Pollutant: Iron

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47265, Iron
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID: 73323

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47265, Iron
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73324
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Cottonwood Creek (Tijuana River watershed) within the Tijuana Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47290

Region 9

Cottonwood Creek (Tijuana River watershed)

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for

pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of seven samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of seven samples (water) exceeded the water quality objective/guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47290, Lead
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73333
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47290, Lead
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73326

Pollutant: Lead
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47290, Lead
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73334

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana

	River watershed) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47290, Lead

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID:	73335
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	47291	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the criteria/guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the criteria/guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47291, Malathion	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73341
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47291, Malathion

Region 9

Cottonwood Creek (Tijuana River watershed)

LOE ID:	78010
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	47292	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant: Manganese
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

 Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47292, Manganese	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID: 73342

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Cottonwood Creek (Tijuana River watershed) within the Tijuana Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47292, Manganese
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73343
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 49006
Cottonwood Creek (Tijuana River watershed)**

Region 9

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49006, Nitrate/Nitrite (Nitrite + Nitrate as N)
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID: 73398

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected on a single day 7/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49006, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73397
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49008	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49008, Nitrogen, Nitrite
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73399
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 49008, Nitrogen, Nitrite
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73400
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected over the time period 5/28/2003-7/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47294	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the guideline/criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceed the guideline/criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47294, Nitrogen, ammonia (Total Ammonia)
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73356
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen (in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47294, Nitrogen, ammonia (Total Ammonia)
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73357
Pollutant:	Nitrogen, ammonia (Total Ammonia)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47294, Nitrogen, ammonia (Total Ammonia)
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73358
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected over the time period 5/28/2003-7/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47295	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of one sample exceeds the objective for the COLD beneficial use, and zero of one sample exceeds the objective for the WARM beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one sample exceeds the objective for COLD and zero of one sample exceeds the objective for WARM, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47295, Oxygen, Dissolved	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73402
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Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47295, Oxygen, Dissolved
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73401
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation: Data was collected on a single day 5/6/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47296	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant: Permethrin, total
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the criteria, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47296, Permethrin, total	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID: 73404

Pollutant: Permethrin, total
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47298	Region 9
Cottonwood Creek (Tijuana River watershed)		
Pollutant:	Silver	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 47298, Silver
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73414
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47298, Silver
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73416
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47299	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Specific Conductivity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one samples exceeded the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47299, Specific Conductivity	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73421
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Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47300	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47300, Sulfates
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73422
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47300, Sulfates
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73424
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Cottonwood Creek (Tijuana River watershed) within the Tijuana Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47301	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47301, Temperature, water	Region 9
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Cottonwood Creek (Tijuana River watershed)

LOE ID:	73425
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47302	Region 9
Cottonwood Creek (Tijuana River watershed)		
Pollutant:	Total Dissolved Solids	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the one sample exceeds the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47302, Total Dissolved Solids
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73432
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47302, Total Dissolved Solids
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73434
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Cottonwood Creek (Tijuana River watershed) within the Tijuana Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47304	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47304, Toxicity
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73435
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 911S04086.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

**DECISION ID 47309
Cottonwood Creek (Tijuana River watershed)**

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of seven samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of seven samples (water) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47309, Zinc
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73445
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected

Temporal Representation:	at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Environmental Conditions:	Data was collected 5/28/2003 - 6/2/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47309, Zinc	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73444
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47309, Zinc	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73443
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47309, Zinc
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73448
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47309, Zinc
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73447

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 47297

Region 9

Cottonwood Creek (Tijuana River watershed)

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one

sample exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47297, pH
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73406
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 49002
Cottonwood Creek (Tijuana River watershed)**

Region 9

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Five of eight single samples exceed the water quality objective for enterococcus of 61/100ml for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of eight single samples exceed the water quality objective for enterococcus of 61/100ml for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49002, Indicator Bacteria Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73311
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]

Temporal Representation: Data was collected over the time period 5/28/2003-6/2/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49002, Indicator Bacteria
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73426

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 8

Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxicsubstances in concentrations which are toxic to,or which produce detrimental physiologicalresponses in human, plant, animal, or indigenousaquatic life (Basin Plan).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).

Guideline Reference: [Draft Guidance for Fresh Water Beaches, Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.](#)

Spatial Representation: Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]

Temporal Representation: Data was collected over the time period 5/28/2003-6/2/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49002, Indicator Bacteria
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID: 73314

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek @ Old Highway 80 (Bridge Crossing)]
Temporal Representation:	Data was collected over the time period 5/28/2003-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47293	Region 9
Cottonwood Creek (Tijuana River watershed)		
Pollutant:	Nickel	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Original	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample (sediment) and zero of one sample (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 	

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample (sediment) and zero of one sample (water) exceeded the water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47293, Nickel
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73395
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47293, Nickel
Cottonwood Creek (Tijuana River watershed)**

Region 9

LOE ID:	73396
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47293, Nickel
Cottonwood Creek (Tijuana River watershed)

Region 9

LOE ID:	73346
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47307	Region 9
Cottonwood Creek (Tijuana River watershed)		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeds the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47307, Turbidity	Region 9
Cottonwood Creek (Tijuana River watershed)	

LOE ID:	73441
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cottonwood Creek (Tijuana River watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Cottonwood Creek (Tijuana River watershed) within the Tijuana Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cottonwood Creek (Tijuana River watershed) was collected at 1 monitoring site [Cottonwood Creek ~0.7mi below Hauser Cr. - 911S04086]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Troy Canyon \(to 0.3 mile upstream from confluence w Long Canyon\)](#)
Water Body ID: CAR9116000020041108124851
Water Body Type: River & Stream

DECISION ID	44682	Region 9
Troy Canyon (to 0.3 mile upstream from confluence w Long Canyon)		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 44682, Benthic Community Effects	Region 9
Troy Canyon (to 0.3 mile upstream from confluence w Long Canyon)	

LOE ID: 76827
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores for this water body were both above 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 911TCCTCx-Troy Canyon Creek (TCC2).
Temporal Representation:	Surveys done June 6, 2007.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44682, Benthic Community Effects
Troy Canyon (to 0.3 mile upstream from confluence w Long Canyon)

Region 9

LOE ID:	26475
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six samples of IBI data were taken from May 2000 to 2007 at two sampling sites. Of the total number of samples, two samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the

	biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 911TCCTCx and 911TJTCC2 on Troy Canyon Creek.
Temporal Representation:	Sampling occurred during six events from May 2000 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44682, Benthic Community Effects

Region 9

Troy Canyon (to 0.3 mile upstream from confluence w Long Canyon)

LOE ID:	79697
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One samples was taken at one station on Troy Canyon Creek. The CSCI score was above the 0.79 threshold, and therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.

Spatial Representation:	Samples were collected at the following stations: 911TCCTCx
Temporal Representation:	Surveys done in 2008
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Long Canyon \(Cottonwood wshed\) \(from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon\)](#)
Water Body ID: CAR9116000020041108131738
Water Body Type: River & Stream

DECISION ID	43336	Region 9
Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion:

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43336, Benthic Community Effects	Region 9
Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)	

LOE ID: 79696

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Two samples were taken at one station on Long Canyon. The CSCI scores were above the 0.79 threshold, and therefore not exceeding the water quality objective for the aquatic life beneficial use.

Data Reference: [RWB9 Status Sampling 2007 and 2008](#)
[Region 9 CSCI Scores & Water Body Information](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 911TJLCC2
Temporal Representation:	Surveys done in 2007 and 2008
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008

Line of Evidence (LOE) for Decision ID 43336, Benthic Community Effects

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

LOE ID:	26723
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken on October 2002 at one sampling site. The sample exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: SR-AD on Long Canyon Creek.
Temporal Representation:	Sampling occurred during one event on October 2002.
Environmental Conditions:	

QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.

QAPP Information Reference(s): [Quality Assurance Manual for Freshwater Bioassessment Revision 0](#)

Line of Evidence (LOE) for Decision ID 43336, Benthic Community Effects

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

LOE ID: 26424

Pollutant: Benthic Community Effects

LOE Subgroup: Adverse Biological Responses

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: Two samples of IBI data were taken in May 2001 and July 2006 at two sampling sites. None of the samples exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)
[2007 SDRWQCB Bioassessment Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at two sites: 911TJLCC2 and 911LCCCFC on Long Canyon Creek.

Temporal Representation: Sampling occurred during one event on May 2001 and one event on July 2006.

Environmental Conditions:

QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.

QAPP Information Reference(s): [State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan](#)

Line of Evidence (LOE) for Decision ID 43336, Benthic Community Effects

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

LOE ID: 74162

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores for this water body are all above 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 911TJLCC2 (Long Canyon Creek 2).
Temporal Representation:	Surveys done June 6, 2007 and May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

DECISION ID	44018	Region 9
Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)		
Pollutant:	Oxygen, Dissolved	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 25 samples exceed the Basin Plan water quality objective for dissolved oxygen.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 	

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 25 samples exceed the Basin Plan water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44018, Oxygen, Dissolved

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

LOE ID:	30164
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 1998. None of the 25 samples were in exceedance. (SWRCB, 2003)
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters with a WARM beneficial use, the WQO for Dissolved Oxygen is 5.0 mg/L. For a COLD beneficial use, the WQO is 6.0 mg/L. For all other beneficial uses, the WQO for DO is 7.0 mg/L. The annual mean concentration is not to be less than this more than 10% of the time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Long Canyon Creek at site LCC2.
Temporal Representation:	Samples were collected once each on 03/12/1997, 05/13/1997, 06/18/1997, and 01/29/1998.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID

43886

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Basin Plan water quality objective for pH. Although the LOE states that 25 samples were collected in total, these samples were taken over the course of four separate days, and thus can only be counted as four discrete samples as per the temporal independence requirements of the listing policy (section 6.1.5.6).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the Four samples exceed the Basin Plan water quality objective for pH and this sample count is insufficient to determine with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 43886, pH		Region 9
Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)		
LOE ID:	30166	
Pollutant:	pH	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	25	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 1998. None of the 25 samples were in exceedance. (SWRCB, 2003).	
Data Reference:	Placeholder reference 2006 303(d)	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).	
Objective/Criterion Reference:	Placeholder reference 2006 303(d)	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at Long Canyon Creek site LCC2.	
Temporal Representation:	Samples were collected on 03/12/1997, 05/13/1997, 06/18/1997, and 01/29/1998. Five to nine of the samples were collected per sampling day over the course of 3 minutes to 1.5 hours.	

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Data used in 2002 assessment.

DECISION ID	43162	Region 9
Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 4.2 of the Listing Policy. Under section 4.2 a one line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the samples exceed the water quality objective for total dissolved solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of four samples exceeded the total dissolved solids objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 26 samples is needed for application of table 4.2.
4. Pursuant to 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43162, Total Dissolved Solids	Region 9
Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)	

LOE ID:	30106
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the four samples collected exceeded the water quality objective. Samples were collected in March, May and June 1997 and once in January 1998 by the City of San Diego Water Department.

Data Reference:	Monitoring Data for Long Canyon Creek (San Diego County). August 2, 2001
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	For inland surface waters and all beneficial uses, the water quality objective for total dissolved solids is 500 mg/l.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station was sampled on Long Canyon Creek. Station ID is LCC2.
Temporal Representation:	Samples were collected in March, May and June 1997 and once in January 1998.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with the City of San Diego's quality assurance plan.
QAPP Information Reference(s):	Water Quality Laboratory. Quality Assurance Manual

Line of Evidence (LOE) for Decision ID 43162, Total Dissolved Solids

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

LOE ID:	30165
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego Water Dept. in 1997 and 1998. Six of the 25 samples were in exceedance. All 6 samples were collected on 01/29/1998.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters and all beneficial uses, the WQO for TDS is 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Long Canyon Creek site LCC2.
Temporal Representation:	Samples were collected on 03/12/1997, 05/13/1997, 06/18/1997, and 01/29/1998. Five to nine of the samples were collected per day over a period of 3 minutes to 1.5 hours.
Environmental Conditions:	
QAPP Information:	Data used in 2002 assessment.
QAPP Information Reference(s):	

DECISION ID

34024

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

Pollutant:	Habitat Assessment (Streams)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollutant

Regional Board Conclusion:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this water body habitat. This sample site received a rating of excellent because it was 123.89% comparable to the reference, and had an overall score of 113. (SWRCB, 2003).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This sample site received a rating of excellent because it was 123.89% comparable to the reference, and had an overall score of 113. (SWRCB, 2003).
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34024, Habitat Assessment (Streams)

Region 9

Long Canyon (Cottonwood wshed) (from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon)

LOE ID: 30163

Pollutant: Habitat Assessment (Streams)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Data were collected by the City of San Diego Water Dept. in 1998. Sample site LCC2 received a rating of excellent because it was 123.89% comparable to the reference, and had an overall score of 113. (SWRCB, 2003).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No Objective.
Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Long Canyon Creek site LCC2.

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Samples were collected on 01/29/1998.
Data used in 2002 assessment.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [La Posta Creek](#)
Water Body ID: CAR9117000020011025112350
Water Body Type: River & Stream

DECISION ID	44151	Region 9
La Posta Creek		

Pollutant: Ammonia as Nitrogen | Nickel | Phosphorus | Total Nitrogen as N
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.2 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the four samples exceed the water quality objectives.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the four samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 and is not enough samples for use of Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44151, Multiple Pollutants	Region 9
La Posta Creek	

LOE ID: 26412

Pollutant: Ammonia as Nitrogen | Nickel | Phosphorus | Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the four samples collected at La Posta Creek station 4 911TLAP04 exceeded the water quality objective. Samples were collected from June 2005, September 2005, January 2006, and April 2006, for conventional inorganics analyses.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Ammonia as N 0.025 mg/l, total nitrogen and phosphorus (If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used), and sulfate 250 mg/l.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at La Posta Creek station 4(911TLAP04); (Latitude 32.6999, Longitude -116.4795).
Temporal Representation:	Water samples were collected on June 2005, September 2005, January 2006, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	43897	Region 9
La Posta Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this indicator. 3 of 6 samples exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 3 of 6 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43897, Benthic Community Effects

Region 9

La Posta Creek

LOE ID:	26409
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six samples of IBI data were taken from November 2000 to 2007 at one sampling site. Three of the six samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 911LPCCTT on La Posta Creek.
Temporal Representation:	Sampling occurred during six events from November 2000 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID

33098

Region 9

Pollutant:	Metals
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of 4 samples exceeded the CTR or MCL values for selected metals and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33098, Metals

Region 9

La Posta Creek

LOE ID:	26410
Pollutant:	Metals
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four samples were collected at La Posta Creek station 4 (911TLAP04) during the months of June 2005, September 2005, January 2006, and April 2006, for the following constituents: aluminum, arsenic, cadmium, copper, selenium, silver, zinc. None of the four samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level (MCL) for aluminum is 1.0 mg /l. The dissolved chronic criterion for the following metals applies: arsenic 150 Åµg/l ,cadmium 2.2 Åµg/l, copper 9.0

Objective/Criterion Reference:

Âµg/l , selenium 5.0 Âµg/l, zinc 120 Âµg/l, chromium 11 Âµg/l, manganese 0.05 mg/l, nickel 52 Âµg/l, lead 2.5 Âµg/l, and silver 3.4 Âµg/l. California Toxics Rule. 2007.

[Water Quality Control Plan for the San Diego Basin](#)

[Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Water samples were collected at La Posta Creek station 4 (911TLAP04); (Latitude 32.6999, Longitude -116.4795).

Temporal Representation:

Water samples were collected on June 2005, September 2005, January 2006, and April 2006.

Environmental Conditions:

QAPP Information:

Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID

33145

Region 9

La Posta Creek

Pollutant:

PAHs (Polycyclic Aromatic Hydrocarbons)

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:

Revision Status

Original

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 4 samples exceeded the CTR value for PAHs and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33145, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

La Posta Creek

LOE ID:	26411
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four samples were collected at La Posta Creek station 4 (911TLAP04) during the months of June 2005, September 2005, January 2006, and April 2006. None of the four samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Evaluation guidelines used came California Toxics Rule for Human Health Risk. Acenaphthene; 1200 ug/l, Anthracene; 9,600 ug/l, Benz(a)anthracene; 4.4 ug/l, Benzo(b)fluoranthene; 4.4 ug/l, Benzo(k)fluoranthene; 4.4 ug/l, Chrysene; 4.4 ug/l, Fluoranthene; 300 ug/l, and Fluorene; 1300 ug/l.
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at La Posta Creek station 4 (911TLAP04); (Latitude 32.6999, Longitude -116.4795).
Temporal Representation:	Water samples were collected on June 2005, September 2005, January 2006, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	43362	Region 9
La Posta Creek		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 4 samples exceeded the CTR value for PCBs and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43362, PCBs (Polychlorinated biphenyls)

Region 9

La Posta Creek

LOE ID:	26543
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two samples were collected at La Posta Creek station 4 911TLAP04 during the months of June 2005, September 2005, January 2006, and April 2006, for PCBs analyses. None of the four samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan; waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCL 0.5 ug/l) specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at La Posta Creek station 4 911TLAP04; (Latitude 32.6999, Longitude -116.4795).
Temporal Representation:	Water samples were collected on June 2005, September 2005, January 2006, and April

2006.

Environmental Conditions:

QAPP Information:

Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon](#)
Water Body ID: CAX9046100019991116164230
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43876	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2008
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 129 of 472 samples exceed the SSM water quality objective for total coliform for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 129 of 472 samples exceed the SSM water quality objective for total coliform for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	

LOE ID: 27422
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	302
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 302 with 16 samples exceeding the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060, Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	27406
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	302
Number of Exceedances:	117
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 302 with 117 samples exceeding the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060, Lat/ Long : 33.01563/ -117.28127.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID: 74686

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 156

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 156 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the San Elijo Lagoon site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID: 74685

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	170
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon to determine beneficial use support and results are as follows: 12 of 170 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon was collected at 1 monitoring site [Cardiff/ San Elijo Lagoon]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	74684
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 156 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Elijo Lagoon site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	74683
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 156 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Elijo Lagoon site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon**

LOE ID:	77664
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	155
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-three of the 155 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon.

Temporal Representation: The samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID: 31207

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 18

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 117 dry month (April through October) single samples were collected with 18 dry month geomeans calculated. None of the 18 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.

Temporal Representation: Samples were collected weekly from May 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID: 30742

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 197 single samples were collected of which 188 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	31208
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 197 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Four of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060, Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	31206
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 195 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach/San Elijo Lagoon, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	27496
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon**

LOE ID:	27469
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 197 single samples were collected with 27 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006
Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria	
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	
Region 9	
LOE ID:	27417
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	11
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 302. Of the 302 samples, 11 were correlated with a storm event. Eight of the 11 storm samples exceeded the single sample maximum total coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060, Lat/ Long : 33.01563/ -117.28127.

Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	

LOE ID:	27480
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	300
Number of Exceedances:	21
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 300 single samples were collected with 21 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	

LOE ID:	27491
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from January 2004 through December 2007. The number of samples collected for total coliform analysis was 302 with 34 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060, Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	27482
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with 16 samples correlated with a storm event. Two of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	

LOE ID:	27444
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 302 with 11 samples correlated with a storm event. Two of the storm samples exceed the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060, Lat/ Long : 33.01563/ -117.28127.

Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	

LOE ID:	27465
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 197 single samples were collected with nine samples correlated with a storm event. Three of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	

LOE ID:	27452
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	197
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 197 single samples were collected with eight samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	30643
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected of which 171 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID:	30849
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	291
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 302 of which 291 are dry weather (AB411) samples with 14 of those samples exceeding the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach, at Station SE-060, Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID: 4681

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43876, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon

LOE ID: 27481

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 35
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data were collected by the County of San Diego from January 2004 through December 2007. A total of 300 single samples were collected with 35 monthly geomeans calculated. Only one of the geomeans exceeded the geomean water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Cardiff State Beach/San Elijo Lagoon, at Station SE-060 Lat/ Long : 33.01563/ -117.28127.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth](#)
Water Body ID: CAX9061000020021127155300
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44844	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 125 of the 676 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 125 of the 676 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID: 26428
Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 497 single samples were collected with 93 geomeans calculated. Two of the 93 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

LOE ID:	74782
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	165
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 165 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the surfzone outfall site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

Region 9

LOE ID: 26430

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 398
Number of Exceedances: 17

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 398 single samples were collected with 17 exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

Region 9

LOE ID: 26434

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 487 single samples were collected with 90 monthly geomeans calculated. Six of the 90 geomeans exceed the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

LOE ID:	26435
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 487 single samples were collected with 22 samples correlated with a storm event. Eleven of the 22 single samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	26431
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 398 single samples were collected with 78 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth**

LOE ID:	26432
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 398 single samples were collected with 19 samples correlated with a storm event. Seven of the 19 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth**

LOE ID:	26418
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 72 single samples were collected with 22 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230.
Temporal Representation:	Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

LOE ID:	26426
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	21
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 497 single samples were collected with 21 samples correlated with a storm event. Sixteen of the 21 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and

not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

LOE ID: 26427

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 497
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 497 single samples were collected with 11 samples exceeded the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

Region 9

LOE ID:	26425
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	497
Number of Exceedances:	120
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 497 single samples were collected with 120 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

Region 9

LOE ID:	26429
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 497 single samples were collected with 21 samples

	correlated with a storm event. Six of the 21 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

LOE ID:	28190
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	35
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 35 beach advisory days for two locations in Del Mar. Bacteriological samples are collected on a weekly basis from April through October. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange, March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Anderson Canyon on Torrey Pines State Beach and at the mouth of Los Penasquitos Lagoon.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007. For Anderson Canyon, the sampling occurred in 2002 through 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	3631
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	A total of 180 analyses were performed from 1999 through 2003. Of these, there was only one exceedance of the bacterial standards for all three indicators: The Enterococcus standard of 104 MPN/100mL was exceeded in 10/2002 (City of San Diego, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The objective is numeric.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	From AB411: Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Two stations were monitored at Anderson Canyon during this time: one at the sampling site and one 75 feet to the left of the site.
Temporal Representation:	Data were available for this assessment from 01/2002 through 10/2004. The majority of samples were taken during the dry season, but samples were also taken during the wet

Environmental Conditions:	<p>season.</p> <p>The report notes that "there was one sewage spill that impacted Anderson Canyon. It did not appear to have an impact on bacterial indicator levels."</p> <p>Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.</p>
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	30713
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	379
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from Januray 1999 through December 2007. A total of 398 single samples were collected of which 379 are dry weather (AB411) samples with 10 exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from Januray 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	31307
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 271 dry month (April through October) single samples were collected with 50 dry month geomeans calculated. None of the 50 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

LOE ID:	31308
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 351 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

LOE ID:	30602
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	465
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from Januray 1999 through December 2007. A total of 487 single samples were collected of which 465 are dry weather (AB411) samples with 16 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from Januray 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

Region 9

LOE ID: 30818

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 476
Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 497 single samples were collected of which 476 are dry weather (AB411) samples with five samples exceeded the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth

Region 9

LOE ID: 74783

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 179
Number of Exceedances: 5

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Miramar Reservoir HA, Los Penasquitos River mouth to determine beneficial use support and results are as follows: 5 of 179 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Miramar Reservoir HA, Los Penasquitos River mouth was collected at 1 monitoring site [Torrey Pine at Los Peñasquitos Lagoon mouth]
Temporal Representation:	Data was collected over the time period 1/9/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	74784
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	165
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 165 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Torrey Pines site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	31306
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 352 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. Two of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	77644
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	164
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Five of the 164 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Miramar Reservoir HA, Los Penasquitos River mouth.
Temporal Representation:	The samples were collected from September 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	74781
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	165
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 165 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Torrey Pines site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44844, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth	

LOE ID:	26433
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	487
Number of Exceedances:	27
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 487 single samples were collected with 27 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Los Penasquitos River mouth outlet at Torrey Pines State Beach, Del Mar, California. Station identification number is FM-100.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon](#)
Water Body ID: CAX9063000020020805132658
Water Body Type: Coastal & Bay Shoreline

DECISION ID	41392	Region 9
Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Based on data collected from 2002 to 2005, one of 71 samples exceed the water quality objective for enterococcus of a SSM of 104/100ml for the protection of REC-1 and zero of 72 samples exceed the WQO for total coliform of a SSM of 230/100ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Based on data collected from 2002 to 2005, one of 71 samples exceed the water quality objective for enterococcus of a SSM of 104/100ml for the protection of REC-1 and zero of 72 samples exceed the WQO for total coliform of a SSM of 230/100ml for the protection of SHELL and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon	

LOE ID: 28278
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	71
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 71 single samples with one sample exceeding the water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230.
Temporal Representation:	Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria
Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon

Region 9

LOE ID:	28279
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 71 single samples with 22 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230.

Temporal Representation:

Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon

LOE ID: 28273

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 72
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 72 single samples were collected with no samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230

Temporal Representation:

Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon

LOE ID:	28274
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 72 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230.
Temporal Representation:	Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria
Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon

Region 9

LOE ID:	28275
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 72 single samples were collected with 22 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230.
Temporal Representation:	Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon

LOE ID:	28276
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 72 single samples were collected with none exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230.
Temporal Representation:	Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria
Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon

Region 9

LOE ID: 28277

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 22
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 2002 through June 2005. A total of 72 single samples were collected with 22 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Anderson Canyon at Torrey Pines State Beach, Del Mar, California. Station identification number is EH-353. Lat 32.94210 Long -117.26230.

Temporal Representation: Samples were collected from April 2002 through June 2005. The majority of the samples came from April through October of 2002 and 2003.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 41392, Indicator Bacteria
Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon

Region 9

LOE ID: 28280

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	2555
Number of Exceedances:	35
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 35 beach advisory days for two locations in Del Mar. Bacteriological samples are collected on a weekly basis from April through October. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Anderson Canyon on Torrey Pines State Beach and at the mouth of Los Penasquitos Lagoon.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007. For Anderson Canyon, the sampling occurred in 2002 through 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline; Kellogg Street Beach](#)
Water Body ID: CAX9081000020020805134910
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44519
San Diego Bay Shoreline; Kellogg Street Beach

Region 9

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 243 samples exceed the contact recreation single sample maximum water quality objective for enterococcus. One out of 38 samples exceeded the contact recreation geomean objective for enterococcus. Six out of 210 samples exceeded the contact recreation single sample maximum for Fecal Coliform. Zero out of 31 samples exceeded the contact recreation geomean objective for Fecal Coliform. Three of the 71 samples exceeded the shellfish harvesting single sample objective for Total Coliform. Five of the 84 samples exceeded the shellfish harvesting rolling 30 day geomean for Total Coliform. Zero of the 16 samples exceeded the Water Contact Recreation single sample geomean objective for Total Coliform. Zero of the 67 samples exceeded the Water Contact Recreation single sample water quality objective for Total Coliform.

The water body segment is identified as an AB411 beach and data collected during the time frame of April 1st to October 31st (dry weather) is assessed using a four percent exceedance percentage (sections 3.3 and 4.3 of Listing Policy). There are two additional lines of evidence for dry weather single sample and geometric mean calculations. One of the 66 samples exceeded the Contact Recreation Single Sample Maximum Objective and Zero out of 61 samples exceeded the Dry Weather Contact Recreation Geomean Objective for enterococcus. One out of 38 samples exceeded the contact recreation dry weather single sample objective and Zero out of 62 samples exceeded the contact recreation geomean objective for Fecal Coliform. Zero out of 61 samples exceeded the contact recreation dry weather geomean objective for Total Coliform. The single sample and geometric mean results do not exceed the allowable limit in Section 3.3 of the listing Policy (at the applicable four percent exceedance percentage – AB411).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of the 243 samples exceed the contact recreation single sample maximum water quality objective for enterococcus. One out of 38 samples exceeded the contact recreation geomean objective for enterococcus. Six out of 210 samples exceeded the contact recreation single sample maximum for Fecal Coliform. Zero out of 31 samples exceeded the contact recreation geomean objective for Fecal Coliform. Three of the 71 samples exceeded the shellfish harvesting single sample objective for Total Coliform. Five of the 84 samples exceeded the shellfish harvesting rolling 30 day geomean for Total Coliform. Zero of the 16 samples exceeded the Water Contact Recreation single sample geomean

objective for Total Coliform. Zero of the 67 samples exceeded the Water Contact Recreation single sample water quality objective for Total Coliform and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. One of the 66 samples exceeded the Contact Recreation Single Sample Maximum Objective and Zero out of 61 samples exceeded the Dry Weather Contact Recreation Geomean Objective for enterococcus. One out of 38 samples exceeded the contact recreation dry weather single sample objective and Zero out of 62 samples exceeded the contact recreation geomean objective for Fecal Coliform. Zero out of 61 samples exceeded the contact recreation dry weather geomean objective for Total Coliform. The single sample and geometric mean results do not exceed the allowable limit in Section 3.3 of the listing Policy (at the applicable four percent exceedance percentage – AB411).

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	30677
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected of which 66 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria**Region 9****San Diego Bay Shoreline; Kellogg Street Beach**

LOE ID:	29847
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2001 to December 2007, there were eight beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>California Code of Regulations. Title 17, Section 7960.</p> <p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.</p>
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Beach advisories were from Kellogg St Beach located in San Diego Bay.
Temporal Representation:	The beach advisories covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria**Region 9****San Diego Bay Shoreline; Kellogg Street Beach**

LOE ID: 75569

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 61 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Lawrence Street site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	75657
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	71
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for San Diego Bay Shoreline; Kellogg Street Beach to determine beneficial use support and results are as follows: 3 of 71 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Diego Bay Shoreline; Kellogg Street Beach was collected at 2 monitoring sites [Lawrence (Kellogg) St., Lawrence St]
Temporal Representation:	Data was collected over the time period 4/2/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	75656
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 62 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Lawrence Street site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	75655
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 61 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four

Data Reference:	percent exceedance frequency should be used. Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Lawrence Street site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	77701
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	62
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Five of the 62 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline; Kellogg Street Beach, Lawrence St station.
Temporal Representation:	The samples were collected from July 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	27711
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 39 single samples were collected with one sample correlated with a storm event. This sample did not exceed the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	27710
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 39 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria
San Diego Bay Shoreline; Kellogg Street Beach

Region 9

LOE ID:	27709
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with one sample correlated with a storm event. This sample did not exceed the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID: 27708

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 67
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with no sample exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	27707
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with one sample correlated with a storm event. This sample exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	27706
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	67

Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with 6 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	27716
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with 16 monthly geomeans calculated. None of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID: 27715

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 39 single samples were collected and 9 geomeans calculated. None of the 9 geomeans exceeded the geomean water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).
Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	27714
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with 16 monthly geomeans calculated. None of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria
San Diego Bay Shoreline; Kellogg Street Beach

Region 9

LOE ID:	27713
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with one sample correlated with a storm event. This sample did not exceed the single sample water quality objective.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria
San Diego Bay Shoreline; Kellogg Street Beach

Region 9

LOE ID:	27712
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	67
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria
San Diego Bay Shoreline; Kellogg Street Beach

Region 9

LOE ID: 31117

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with 16 monthly geomeans calculated. None of the 16 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria
San Diego Bay Shoreline; Kellogg Street Beach

Region 9

LOE ID: 30884

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria
San Diego Bay Shoreline; Kellogg Street Beach

Region 9

LOE ID:	30778
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 39 single samples were collected of which 38 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lawrence Street, San Diego, California. Station identification number is EH-211.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44519, Indicator Bacteria

Region 9

San Diego Bay Shoreline; Kellogg Street Beach

LOE ID:	3650
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	584
Number of Exceedances:	26
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 1999 to 2003. For enterococcus, 16 of 176 single samples were in exceedance and 1 of 22 calculated geomeans was in exceedance. For fecal coliform, 5 of 171 samples were in exceedance and 0 of 22 calculated geomeans were in exceedance. For total coliform, 0 of 22 geomeans were in exceedance. Where the FC/TC ratio was less than 0.1, there were 0 exceedances. Where the ratio was greater than 0.1, 4 of 171 samples were in exceedance. (City of San Diego, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB411 standards: for fecal coliform: 30-day avg is 200 colonies/100 mL, single sample standard is 400 colonies/100 mL. For total coliform: 30-day avg. is 1,000 colonies/100mL, single sample standard is 10,000 colonies/100 mL. If fecal/total ratio is greater than 0.1, the single sample maximum for total coliform is 1,000 colonies/100 mL.. The AB411 standard for enterococcus for the 30-day avg is 35 colonies/100mL, single sample maximum is 104 colonies/100 mL.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:

Samples were collected at the San Diego Bay Shoreline, Kellogg St. Samples were collected at 3 locations relative to each other: "Left," "middle," and "right."

Temporal Representation:

Samples were collected from 04/27/1999 to 10/23/2003.

Environmental Conditions:

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

QAPP Information:

QA Info Missing

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, Shelter Island Shoreline Park](#)
Water Body ID: CAX9081000020020805135647
Water Body Type: Coastal & Bay Shoreline

DECISION ID	34011	Region 9
San Diego Bay Shoreline, Shelter Island Shoreline Park		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria TMDL for San Diego Bay and Dana Point Harbor Shorelines
TMDL Project Code:	659
Date TMDL Approved by USEPA:	10/26/2009
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. With the latest data, 27 of 124 geomean samples collected during the AB411 period exceeded the water quality objective (WQO) for enterococcus of 35/100 ml, and 85 of 416 samples exceed the WQO for total coliform of a single sample maximum of 230/100 ml, and these exceed the allowable frequency listed in Sections 4.3 and 4.2 of the Listing Policy.
4. The bacteria TMDL for Shelter Island and Baby Beach was approved by USEPA on 10/26/2009
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Shelter Island Shoreline Park	

LOE ID: 27288
Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	69
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected with 69 monthly geomeans calculated. None of the 69 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria
San Diego Bay Shoreline, Shelter Island Shoreline Park

Region 9

LOE ID:	27290
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	68
Number of Exceedances:	25
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected with 68 monthly geomeans calculated. 25 of the 68 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	27286
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	337
Number of Exceedances:	81
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected with 81 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID: 27285

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 300 single samples were collected with 6 samples correlated with a storm event. Three of the 6 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID: 27284

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	300
Number of Exceedances:	41
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 300 single samples were collected with 41 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria
San Diego Bay Shoreline, Shelter Island Shoreline Park

Region 9

LOE ID:	27283
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected with 7 samples correlated with a storm event. None of the 7 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria
San Diego Bay Shoreline, Shelter Island Shoreline Park

Region 9

LOE ID:	27282
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	337
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	77699
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	70
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eleven of the 70 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline, at Spanish Landing.
Temporal Representation:	The samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	28295
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	658

Data and Information Type: Data Used to Assess Water Quality:	PWS pathogen monitoring (ambient water) For the period from January 2001 to December 2007, there were 658 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline: Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Beach advisories were from Shelter Island Shoreline Park located in San Diego Bay.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Shelter Island Shoreline Park	

LOE ID:	75647
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 70 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Shelter Island Shoreline Park site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Shelter Island Shoreline Park	

LOE ID:	75648
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 70 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Shelter Island Shoreline Park site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Shelter Island Shoreline Park	

LOE ID:	75649
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	79
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for San Diego Bay Shoreline, Shelter Island Shoreline Park to determine beneficial use support and results are as follows: 6 of 79 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Diego Bay Shoreline, Shelter Island Shoreline Park was collected at 1 monitoring site [Shelter Is shoreline park]
Temporal Representation:	Data was collected over the time period 4/16/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	75650
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 70 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Shelter Island Shoreline Park site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria**Region 9****San Diego Bay Shoreline, Shelter Island Shoreline Park**

LOE ID:	3652
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1178
Number of Exceedances:	199
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	A total of 1,178 analyses were performed from 1999 through 2003. Of these, there were 199 exceedances of the bacterial standards for all three indicators. Exceedances occurred during both wet and dry seasons (City of San Diego, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Objectives are numeric.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	From AB411: Enterococcus: 35"per 100 ml for 30-day average", single sample: 104 per 100 ml. Fecal coliform: 30-day average- 200 colonies/100 mL. Single sample- 400 colonies/100mL. Total coliform: 30-day average: 1,000 colonies/100 mL, single sample: If FC/TC ratio is < 0.1, 10,000 colonies/100 mL, if FC/TC ratio is > 0.1, 1,000 colonies/100mL.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Shelter Island Shoreline Park. This site is located in San Diego Bay on the east side of Shelter Island. "Ten stations were monitored at the Shelter Island Shoreline Park site during this time: one at the sampling site, eight as far as 2,800 feet to the left, and one 300 feet to the right of the site."
Temporal Representation:	Data were available for the Shelter Island Shoreline Park assessment from 01/1999 through 10/2003. Samples were collected during both the wet and dry seasons.
Environmental Conditions:	Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.
QAPP Information:	There were no sewage spills that impacted the site from 1999 through 2003.
QAPP Information Reference(s):	QA Info Missing

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria**Region 9****San Diego Bay Shoreline, Shelter Island Shoreline Park**

LOE ID:	3651
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	461
Number of Exceedances:	145
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 1999 to 2003. AB411 standards: For enterococcus, 32 of 47 geomeans were in exceedance and 113 of 414 samples were in exceedance of the single sample standard (City of San Diego, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: For inland surface waters, enclosed bays and estuaries, coastal lagoons, and ground waters with a REC2 beneficial use, the WQO for Fecal Coliform is and average of 2,000 colonies/100mL for any 30-day period. No more than 10% of total samples during any 30-day period should exceed 4,000 colonies per 100 mL. AB411 standards: for fecal coliform: 30-day avg is 200 colonies/100 mL, single sample standard is 400 colonies/100 mL. For total coliform: 30-day avg. is 1,000 colonies/100mL, single sample standard is 10,000 colonies/100 mL. If fecal/total ratio is greater than 0.1, the single sample maximum for total coliform is 1,000 colonies/100 mL. The AB411 standard for enterococcus for the 30-day avg is 35 colonies/100mL, single sample maximum is 104 colonies/100 mL.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in the San Diego Bay at Shelter Island. Samples were collected at three locations in relation to each other: "Left," "Right," and "Middle."
Temporal Representation:	Samples were collected from 05/25/1999 to 10/23/2003.
Environmental Conditions:	Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Shelter Island Shoreline Park	

LOE ID:	31313
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 269 dry month (April through October) single samples were collected with 54 dry month geomeans calculated. Eighteen of the 54 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria
San Diego Bay Shoreline, Shelter Island Shoreline Park

Region 9

LOE ID:	30878
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	330
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected of which 330 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	31314
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 232 dry month (April through October) single samples were collected with 45 dry month geomeans calculated. One of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from April 1999 to October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	31315
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 269 dry month (April through October) single samples were collected with 54 dry month geomeans calculated. None of the 54 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	30772
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	294
Number of Exceedances:	38
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 300 single samples were collected of which 294 are dry weather (AB411) samples with 38 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	30671
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	330
Number of Exceedances:	79
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected of which 330 are dry weather (AB411) samples with 79 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID: 27279

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 337
Number of Exceedances: 79

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 337 single samples were collected with 79 samples exceeded the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID: 27281

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 7

Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected with 7 samples correlated with a storm event. Three of the 7 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Shelter Island Shoreline Park

LOE ID:	27289
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 300 single samples were collected and 60 geomeans calculated. Four of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB,

2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 34011, Indicator Bacteria
San Diego Bay Shoreline, Shelter Island Shoreline Park

Region 9

LOE ID: 27287

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 337 single samples were collected with 7 samples correlated with a storm event. Two of the 7 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Shelter Island, San Diego, California. Station identification number is EH-200.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, G Street Pier](#)
Water Body ID: CAX9082100020021202130542
Water Body Type: Coastal & Bay Shoreline

DECISION ID	33221	Region 9
San Diego Bay Shoreline, G Street Pier		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Data collected in 2006 and 2007 show that 13 of 40 single samples exceed the water quality objective for total coliform of a SSM of 230/100ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data collected in 2006 and 2007 show that 13 of 40 single samples exceed the water quality objective for total coliform of a SSM of 230/100ml and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria	Region 9
San Diego Bay Shoreline, G Street Pier	

LOE ID:	30920
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	40
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. Thirteen of 40 samples exceeded the single sample water quality objective.
Data Reference:	Submittal of Data for G St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four stations along G St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria

Region 9

San Diego Bay Shoreline, G Street Pier

LOE ID:	4702
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria
San Diego Bay Shoreline, G Street Pier
Region 9

LOE ID:	30924
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. None of the 40 samples exceeding the single sample water quality objective.
Data Reference:	Submittal of Data for G St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four stations along G St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria
San Diego Bay Shoreline, G Street Pier
Region 9

LOE ID:	30930
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. Two of the 10 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four stations along G St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria	Region 9
San Diego Bay Shoreline, G Street Pier	

LOE ID:	30926
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. None of the 10 geomeans exceeded the geomean water quality objective.
Data Reference:	Submittal of Data for G St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four stations along G St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria**Region 9****San Diego Bay Shoreline, G Street Pier**

LOE ID:	30928
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. Two of 40 samples exceeding the single sample water quality objective.
Data Reference:	Submittal of Data for G St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four stations along G St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria**Region 9****San Diego Bay Shoreline, G Street Pier**

LOE ID:	30932
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. None of the 40 samples exceeded the single sample water quality objective.

Data Reference:	Submittal of Data for G St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four stations along G St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33221, Indicator Bacteria

Region 9

San Diego Bay Shoreline, G Street Pier

LOE ID:	30934
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Monitoring data was collected from April 2006 through January 2007. None of the 10 geomeans exceeded the geomean water quality objective.
Data Reference:	Submittal of Data for G St. Shorelines, Lindbergh Hydrologic Area (908.21)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four stations along G St. Pier in San Diego Bay
Temporal Representation:	Samples were collected from April 2006 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the Port of San Diego's Quality Assurance Manual.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, Chula Vista Marina](#)
Water Body ID: CAX9091200020021206085938
Water Body Type: Coastal & Bay Shoreline

DECISION ID	34706	Region 9
San Diego Bay Shoreline, Chula Vista Marina		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for removal from the section 303(d) list under section 4 of the Listing Policy. The Policy calls for the delisting of waters if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence is available in the administrative record to assess this pollutant.

The bacteria indicators listing was based on a precautionary posting by the County Health Department and the posting was not backed by any data (section 3.3 of the Listing Policy).

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for maintaining the listing for this water segment-pollutant combination.

This conclusion is based on the staff findings that no bacteria data are available to assess the status of this water body for this pollutant. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 34706, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Chula Vista Marina	

LOE ID:	3654
Pollutant:	Indicator Bacteria
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	The Chula Vista Marina was placed on the 303(d) list for bacteria indicators in 1998. However, the area that was listed is actually south of the Chula Vista marina, rather than within the marina itself. The area south of the marina was listed in 1998 due to postings by the County Department of Public Health. According to RWQCB staff, the Health Department posted the area as a precaution because of a nearby storm drain outlet, not because they had data showing elevated bacteria levels. To the knowledge of RWQCB staff, data were never collected from the water body. The RWQCB staff support delisting this site based on the lack of evidence to support the listing.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	33346	Region 9
San Diego Bay Shoreline, Chula Vista Marina		

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. A large number of samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 3 samples exceeded the 3.1 ppb CTR chronic saltwater criteria and this exceeds the
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allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 33346, Copper
San Diego Bay Shoreline, Chula Vista Marina**

Region 9

LOE ID:	3653
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data were collected by the RWQCB in 03/2004. Two of 3 samples were in exceedance for both the acute and chronic criteria. The sample collected at the north end of marina next to bridge and third pier was in exceedance of chronic criteria, but not acute (SDRWQCB, 2004c).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR: the dissolved copper chronic criterion is 3.1 ppb, and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Diego Bay at the Chula Vista Marina, at the north end of marina next to bridge and third pier, in front of public loading dock, and at the south end of marina.
Temporal Representation:	Data were collected on 03/20/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Diego Bay Shoreline, Tidelands Park](#)
Water Body ID: CAX9101000020020805140653
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44200	Region 9
San Diego Bay Shoreline, Tidelands Park		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Fifty-two of 428 samples exceed the contact recreation single sample maximum water quality objective for enterococcus. Twelve out of 62 samples exceeded the contact recreation geomean objective for enterococcus. 14 out of 396 samples exceeded the contact recreation single sample maximum for Fecal Coliform. Zero out of 72 samples exceeded the contact recreation geomean objective for Fecal Coliform. Three out of 72 samples exceeded the shellfish harvesting objective for Total Coliform. Sixty-Five out of 352 samples exceeded the shellfish harvesting single sample maximum objective for Total Coliform. Two out of 262 samples exceeded the contact recreation single sample maximum objective for Total Coliform. Zero out of 80 samples exceeded the contact recreation monthly objective for Total Coliform. 2 out of 271 samples exceeded the contact recreation single sample objective for Total Coliform.

The water body segment is identified as an AB411 beach and data collected during the time frame of April 1st to October 31st (dry weather) is assessed using a four percent exceedance percentage (sections 3.3 and 4.3 of Listing Policy). There are two additional lines of evidence for dry weather single sample and geometric mean calculations. Twenty-eight of 262 dry weather single samples and 12 of 54 geometric mean calculations exceeded the criteria for the single sample and geometric mean criteria for enterococcus, respectively. Seven out of 218 samples exceeded the contact recreation dry weather single sample objective and zero out of 118 samples exceeded the contact recreation geomean objective for Fecal Coliform. Zero out of 126 samples exceeded the contact recreation dry weather geomean objective for Total Coliform. The single sample and geometric mean results exceed the allowable limit in Section 4.3 of the listing Policy (at the applicable four percent exceedance percentage A- AB411).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-two of 428 samples exceed the contact recreation single sample maximum water quality objective for enterococcus. Twelve out of 62 samples exceeded the contact recreation geomean

objective for enterococcus. 14 out of 396 samples exceeded the contact recreation single sample maximum for Fecal Coliform. Zero out of 72 samples exceeded the contact recreation geomean objective for Fecal Coliform. Three out of 72 samples exceeded the shellfish harvesting objective for Total Coliform. Sixty-Five out of 352 samples exceeded the shellfish harvesting single sample maximum objective for Total Coliform. Two out of 262 samples exceeded the contact recreation single sample maximum objective for Total Coliform. Zero out of 80 samples exceeded the contact recreation monthly objective for Total Coliform. 2 out of 271 samples exceeded the contact recreation single sample objective for Total Coliform and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Twenty-eight of 262 dry weather single samples and 12 of 54 geometric mean calculations exceeded the criteria for the single sample and geometric mean criteria for enterococcus, respectively. Seven out of 218 samples exceeded the contact recreation dry weather single sample objective and zero out of 118 samples exceeded the contact recreation geomean objective for Fecal Coliform. Zero out of 126 samples exceeded the contact recreation dry weather geomean objective for Total Coliform. The single sample and geometric mean results exceed the allowable limit in Section 4.3 of the listing Policy (at the applicable four percent exceedance percentage – AB411).

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria
San Diego Bay Shoreline, Tidelands Park**

Region 9

LOE ID:	75651
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 72 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tidelands Park site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	75652
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 72 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tidelands Park site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	75653
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	81
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for San Diego Bay Shoreline, Tidelands Park to determine beneficial use support and results are as follows: 5 of 81 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Diego Bay Shoreline, Tidelands Park was collected at 1 monitoring site [Tidelands Park]
Temporal Representation: Data was collected over the time period 4/2/2008-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID: 75654

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 72
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 72 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Tidelands Park site.
Temporal Representation: Samples were collected from April 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID: 27346

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 62
Number of Exceedances: 12

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected with 62 monthly geomeans calculated. Twelve of the 62 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	28297
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	135
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 135 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Beach advisories were from Tidelands Park located in San Diego Bay.
Temporal Representation:	The beach closures covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	3655
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	569
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data were collected by the City of San Diego from 1999-2003. For enterococcus, 3 of 17 calculated geomeans were in exceedance and 20 of 166 samples were in exceedance of the single sample standard. For fecal coliform, 0 of 17 geomeans were in exceedance and 5 of 171 single samples were in exceedance. For total coliform, 0 of 17 geomeans were in exceedance. Where the FC/TC ratio was below 0.1, 0 samples were in exceedance of 10.000 colonies/100mL. Where the ratio was greater than 0.1, 4 of 171 samples were in exceedance of 1,000 colonies/100 mL geomean standard (City of San Diego, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB411 standards: for fecal coliform: 30-day avg. is 200 colonies/100 mL, single sample standard is 400 colonies/100 mL. For total coliform: 30-day avg. is 1,000 colonies/100 mL, single sample standard is 10,000 colonies/100 mL. If fecal/total ratio is greater than 0.1, the single sample maximum for total coliform is 1,000 colonies/100 mL. The AB411 standard for enterococcus for the 30-day avg. is 35 colonies/100mL, single sample maximum is 104 colonies/100 mL.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at San Diego Bay at Tidelands Park (bayside). Samples were collected at 3 locations in relation to one another. One location was labeled EH-070-50-L (left), the next labeled EH-070-0-M (middle), and the last was labeled EH-070-75-R (right).
Temporal Representation:	Samples were collected from 3/1999 to 5/2003.
Environmental Conditions:	Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria	Region 9
San Diego Bay Shoreline, Tidelands Park	

LOE ID:	30879
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	262
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected of which 262 are dry weather (AB411) samples with two of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria**Region 9****San Diego Bay Shoreline, Tidelands Park**

LOE ID:	31332
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 203 dry month (April through October) single samples were collected with 46 dry month geomeans calculated. None of the 46 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria**Region 9****San Diego Bay Shoreline, Tidelands Park**

LOE ID:	31333
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 249 dry month (April through October) single samples were collected with 54 dry month geomeans calculated. None of the 54 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria
San Diego Bay Shoreline, Tidelands Park

Region 9

LOE ID:	30773
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	218
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 225 single samples were collected of which 218 are dry weather (AB411) samples with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#) [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID: 30672

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 262

Number of Exceedances: 28

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected of which 262 are dry weather (AB411) samples with 28 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#) [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	31331
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 250 dry month (April through October) single samples were collected with 54 dry month geomeans calculated. Twelve of the 54 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria**Region 9****San Diego Bay Shoreline, Tidelands Park**

LOE ID:	27336
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	271
Number of Exceedances:	60
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999

	through December 2007. A total of 271 single samples were collected with 60 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	27337
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected with 9 samples correlated with a storm event. Five of the 9 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID: 27338

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 271
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected with 2 samples exceeding the single sample water quality objective.
Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria**Region 9****San Diego Bay Shoreline, Tidelands Park**

LOE ID:	27339
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected with 9 samples correlated with a storm event. None of the 9 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria**Region 9****San Diego Bay Shoreline, Tidelands Park**

LOE ID:	27340
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	225
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 225 single samples were collected with 8 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	27341
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 225 single samples were collected with 7 samples correlated with a storm event. One of the 7 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria
San Diego Bay Shoreline, Tidelands Park

Region 9

LOE ID:	27342
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	271
Number of Exceedances:	32
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected with 32 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID: 27343

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected with 9 samples correlated with a storm event. Four of the 9 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:
QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	27344
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 271 single samples were collected with 63 monthly geomeans calculated. None of the 63 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria
San Diego Bay Shoreline, Tidelands Park

Region 9

LOE ID:	27345
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 225 single samples were collected and 55 geomeans calculated. None of the 55 geomeans exceeded the geomean water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tidelands Park (bayside), San Diego, California. Station identification number is EH-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of Orange, Quality Assurance/Quality Control Manual, February 2004
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44200, Indicator Bacteria

Region 9

San Diego Bay Shoreline, Tidelands Park

LOE ID:	77700
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	72
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Three of the 72 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at San Diego Bay Shoreline, Tidelands Park.
Temporal Representation:	The samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Paleta Creek](#)
Water Body ID: CAR9083100020080825092823
Water Body Type: River & Stream

DECISION ID	41404	Region 9
Paleta Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of three samples exceeded the arsenic water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41404, Arsenic	Region 9
Paleta Creek	

LOE ID: 7160
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the 3 samples exceed the water quality objective as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR the Arsenic water quality objective for maximum freshwater concentration is 340 ug/L and continuous freshwater concentration is 150 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID	42881	Region 9
Paleta Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the three samples exceeded the cadmium water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 42881, Cadmium
Paleta Creek**

Region 9

LOE ID:	7162
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the three samples exceed the water quality objective from results in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Cadmium water quality objective for maximum freshwater concentration is 4.3 ug/L and continuous freshwater concentration is 2.2 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule, 40 CFR Part 131, U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

**DECISION ID 43587
Paleta Creek**

Region 9

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of the three samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of three samples exceeded the chromium water quality objective and his sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 43587, Chromium
Paleta Creek**

Region 9

LOE ID:	7164
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of three samples exceeded the chronic water quality objective as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Chromium water quality objective for maximum freshwater concentration is 16 ug/L and continuous freshwater concentration is 11 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2007.
Environmental Conditions:	
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

**DECISION ID 43616
Paleta Creek**

Region 9

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for Nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of three samples exceeded the Nickel water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43616, Nickel
Paleta Creek**

Region 9

LOE ID:	7172
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the three samples exceed the chronic water quality objectives as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Nickel water quality objective for maximum freshwater concentration is 460 ug/L and continuous freshwater concentration is 52 ug/L (U.S. EPA, 2000).

Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation: Samples were collected during 3 storm events in 2006.
Environmental Conditions:
QAPP Information: QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):

DECISION ID	43656	Region 9
Paleta Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of three samples exceeded the selenium water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 43656, Selenium	Region 9
Paleta Creek	

LOE ID:	7167
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the three samples exceeded the chronic water quality objective as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Selenium water quality objective for continuous freshwater concentration is 5.0 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID	42983	Region 9
Paleta Creek		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for silver.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of three samples exceeded the silver water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not
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changed.

Line of Evidence (LOE) for Decision ID 42983, Silver

Region 9

Paleta Creek

LOE ID:	7170
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the single sample exceed the acute water quality as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Silver water quality objective for maximum freshwater concentration is 3.4 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2007.
Environmental Conditions:	
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID

43571

Region 9

Paleta Creek

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the 3 samples exceed the California Toxics Rule criteria for Zinc.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 3 samples exceeded the California Toxics Rule objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43571, Zinc

Region 9

Paleta Creek

LOE ID:	7171
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of three samples exceed the chronic water quality objective as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the zinc water quality objective for maximum freshwater concentration is 120 ug/L and continuous freshwater concentration is 120 ug/L
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2007.
Environmental Conditions:	
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID

43588

Region 9

Paleta Creek

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. All three of the samples exceed the water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three samples exceed the copper water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43588, Copper Paleta Creek

Region 9

LOE ID:	7166
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All three samples exceeded the chronic water quality objective as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Copper water quality objective for maximum freshwater concentration is 14 ug/L and continuous freshwater concentration is 9 ug/L (U.S. EPA, 2000).

Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation: Samples were collected during 3 storm events in 2006.
Environmental Conditions:
QAPP Information: QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):

DECISION ID	41664	Region 9
Paleta Creek		

Pollutant:	Lead
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. All three of the samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All three of the samples exceed the lead water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 41664, Lead	Region 9
Paleta Creek	

LOE ID:	7168
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All three samples exceed the chronic water quality objective as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, May 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Lead water quality objective for maximum freshwater concentration is 82 ug/L and continuous freshwater concentration is 3 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station on Paleta Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Dieguito River](#)
Water Body ID: CAR9051100020080825090830
Water Body Type: River & Stream

DECISION ID	43139	Region 9
San Dieguito River		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of the 43 samples exceed the water quality objective for toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-seven of the 43 samples exceed the water quality objective for toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43139, Toxicity	Region 9
San Dieguito River	

LOE ID:	24991
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- (used for the 303(d) Listing) three samples were collected and three samples show significant toxicity levels (SL) and Compliant with QAPP as determined by the Selenastrum capricornutum growth test.
	Other Toxicity Tests:
	Ceriodaphnia dubia-
	Four samples were collected and two samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive test.
	Hyalella azteca-
	Two samples were collected and neithered show significant toxicity levels (SL) as determined by the Hyalella azteca growth and survival test according to results in the Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected in January, April, May and September 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at the monitoring station San Dieguito 9 (station id: 905SDSDQ9 lat/long: 32.97877/-117.23506), located on the main stem of the San Dieguito River.
Temporal Representation:	Samples were collected in January, April, May and September 2003.
Environmental Conditions:	
QAPP Information:	QA/QC conducted in accordance with the Surface Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43139, Toxicity San Dieguito River

Region 9

LOE ID:	75829
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	14
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-three samples were collected to test for toxicity. Fourteen of the 23 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of Hyalella azteca, growth of Selenastrum capricornutum and survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 905SDC-MLS San Dieguito Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43139, Toxicity
San Dieguito River

Region 9

LOE ID:	7492
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Ceriodaphnia dubia- Six of fifteen samples collected were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test.</p> <p>Hyalella azteca- None of the fifteen samples collected were found to be toxic as determined by the Hyalella azteca survival test.</p> <p>Selenastrum capricornutum- Five of fifteen samples collected were found to be toxic as determined by the Selenastrum capricornutum growth test.</p>
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-821-R-02-013
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.

Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Weston Solutions quality assurance plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

**Line of Evidence (LOE) for Decision ID 43139, Toxicity
San Dieguito River**

Region 9

LOE ID:	75830
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold
Guideline Reference:	
Spatial Representation:	The samples were collected from site 905_SMC00473, San Dieguito Creek
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**DECISION ID
San Dieguito River**

41468

Region 9

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture Highway/Road/Bridge Runoff Municipal Point Sources Urban Runoff/Storm Sewers
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence is available in the administrative record to assess this pollutant. Nineteen of 21 of the samples exceed the Basin Plan water quality objective for Enterococcus. Twelve of 22 samples exceed the Basin Plan water quality objective for Fecal Coliform. One of 7 samples exceed the Basin Plan water quality objective for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of 21 of the samples exceed the Basin Plan water quality objective for Enterococcus. Twelve of 22 samples exceed the Basin Plan water quality objective for Fecal Coliform. One of 7 samples exceed the Basin Plan water quality objective for Total Coliform., and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41468, Indicator Bacteria	Region 9
San Dieguito River	

LOE ID:	7371
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Eight of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41468, Indicator Bacteria
San Dieguito River

Region 9

LOE ID:	75795
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected over the time period 6/10/2003-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 41468, Indicator Bacteria
San Dieguito River

Region 9

LOE ID:	75807
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected over the time period 6/10/2003-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 41468, Indicator Bacteria
San Dieguito River

Region 9

LOE ID:	7311
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, January 2007. Samples were collected one to three times a year from 2001 to 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the criteria for enterococcus sets a maximum limit at 61 colonies per 100mL (RWQCB, 2007).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 41468, Indicator Bacteria
San Dieguito River**

Region 9

LOE ID:	75828
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected over the time period 6/10/2003-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID
San Dieguito River**

49032

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 28 samples exceeded the Objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49032, Arsenic
San Dieguito River**

Region 9

LOE ID:	75740
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]

Temporal Representation: Data was collected on a single day 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 49032, Arsenic

Region 9

San Dieguito River

LOE ID: 78105

Pollutant: Arsenic

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 27

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Arsenic.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]

Temporal Representation: Data was collected over the time period 11/29/2001-11/12/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID

49769

Region 9

San Dieguito River

Pollutant: Benthic-Macroinvertebrate Bioassessments

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final New Decision

Listing Decision:
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this indicator. Twelve out of 13 samples exceeded the objective for freshwater habitat beneficial use..

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 13 samples exceeded the Index of Biological Integrity (IBI) value of poor water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 2 samples is needed to determine impairment using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49769, Benthic-Macroinvertebrate Bioassessments

Region 9

San Dieguito River

LOE ID: 79544

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 12
Number of Exceedances: 8

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: 12 samples were taken at 3 stations along the San Dieguito River. Eight of twelve CSCI scores for this site are below the 0.79 threshold, and therefore are exceeding the water quality objective for the aquatic life beneficial use.

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)
[Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)
[Region 9 CSCI Scores & Water Body Information](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations 905SSD-DDH SMC00473 905SDC-MLS
Temporal Representation:	The samples were collected from 2002 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

Line of Evidence (LOE) for Decision ID 49769, Benthic-Macroinvertebrate Bioassessments

Region 9

San Dieguito River

LOE ID:	75742
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven of the twelve samples collected had IBI scores below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	

Spatial Representation:	The samples were collected at stations 905SDC-MLS, San Dieguito Creek; 905SDC-TWAS-2, San Pasqual Creek and SD-DDH, San Dieguito River. R9 suggest separating San Pasqual station from SD-DDH.
Temporal Representation:	The samples were collected from October 2002 to May 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 49769, Benthic-Macroinvertebrate Bioassessments	Region 9
San Dieguito River	

LOE ID:	75741
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 5.7. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at 905_SMC00473, San Dieguito Creek .
Temporal Representation:	The sample was collected in June 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	49340	Region 9
San Dieguito River		

Pollutant:	Bifenthrin
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Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollution

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Bifenthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Evaluation Guideline for Bifenthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49340, Bifenthrin
San Dieguito River

Region 9

LOE ID: 78107

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 49340, Bifenthrin

Region 9

San Dieguito River

LOE ID:	75752
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49373	Region 9
San Dieguito River		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceed the Objective

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 32 samples exceed the Objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49373, Cadmium	Region 9
San Dieguito River	

LOE ID:	75754
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to

protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]

Temporal Representation:

Data was collected on a single day 6/3/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 49373, Cadmium

Region 9

San Dieguito River

LOE ID: 75753

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]

Temporal Representation:

Data was collected 6/10/2003 - 6/18/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49373, Cadmium

Region 9

San Dieguito River

LOE ID:	75767
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49378	Region 9
San Dieguito River		
Pollutant:	Chlorpyrifos	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the Water Quality Criteria for Chlorpyrifos.	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 20 samples exceeded the Water Quality Criteria for Chlorpyrifos and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49378, Chlorpyrifos

Region 9

San Dieguito River

LOE ID:	75768
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected over the time period 9/23/2005-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

San Dieguito River

LOE ID:	77814
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Chlorpyrifos. Eight sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 49384

Region 9

San Dieguito River

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the Water Quality Criteria for Chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceeded the Water Quality Criteria for Chromium and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49384, Chromium
San Dieguito River****Region 9**

LOE ID:	75769
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 49384, Chromium
San Dieguito River

Region 9

LOE ID:	75778
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID **49393**
San Dieguito River

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceed the Water Quality Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 32 samples exceeded the Water Quality Criteria for Copper and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 49393, Copper
San Dieguito River**

Region 9

LOE ID: 75780

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]

Temporal Representation: Data was collected on a single day 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 49393, Copper

Region 9

San Dieguito River

LOE ID: 75779

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]

Temporal Representation: Data was collected 6/10/2003 - 6/18/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49393, Copper

Region 9

San Dieguito River

LOE ID: 75781

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49733	Region 9
San Dieguito River		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 samples exceed the Criterion for the Warm Freshwater Habitat beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 31 samples exceed the Criterion for the Warm Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
5. Pursuant to section 6.1.5.5 of the Listing Policy, 3 of the samples were thrown out due to the fact that the assessment was less sensitive than the objective.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 49733, Cypermethrin
San Dieguito River**

Region 9

LOE ID:	78111
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 49733, Cypermethrin
San Dieguito River**

Region 9

LOE ID:	75791
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	49741	Region 9
San Dieguito River		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the objective for Warm Freshwater Habitat beneficial use for Deltamethrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the objective for Warm Freshwater Habitat beneficial use for Deltamethrin and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 49741, Deltamethrin
San Dieguito River**

Region 9

LOE ID:	75792
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**DECISION ID 49732
San Dieguito River**

Region 9

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 samples exceed the Criterion for the Warm Freshwater Habitat beneficial use..

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 31 samples exceed the Criterion for the Warm Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49732, Diazinon	Region 9
San Dieguito River	

LOE ID:	75793
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 49732, Diazinon

Region 9

San Dieguito River

LOE ID:	75794
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected over the time period 9/23/2005-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

49729

Region 9

San Dieguito River

Pollutant: Esfenvalerate/Fenvalerate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the Objective for Warm Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the Objective for Warm Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49729, Esfenvalerate/Fenvalerate

Region 9

San Dieguito River

LOE ID: 75806

Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Esfenvalerate.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 49386		Region 9
San Dieguito River		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceed the Water Quality Criteria for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 32 samples exceeded the Water Quality Criteria for Lead and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.	

Line of Evidence (LOE) for Decision ID 49386, Lead		Region 9
San Dieguito River		
LOE ID:	75808	
Pollutant:	Lead	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Dissolved	

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected 6/10/2003 - 6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49386, Lead

Region 9

San Dieguito River

LOE ID:	75809
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR

Objective/Criterion Reference:	contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 49386, Lead	Region 9
San Dieguito River	

LOE ID:	75810
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/29/2001-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

San Dieguito River

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the criterion for Warm Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 28 samples exceed the criterion for Warm Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49726, Malathion

Region 9

San Dieguito River

LOE ID:	75818
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous

Guideline Reference:	maximum for malathion is 0.1 Åµg/L. 2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected over the time period 9/23/2005-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49726, Malathion San Dieguito River

Region 9

LOE ID:	75817
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 2/11/2003-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

49731

Region 9

San Dieguito River

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the criterion for the Warm Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 26 samples exceed the criterion for the Warm Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49731, Nickel

Region 9

San Dieguito River

LOE ID: 75820

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nickel.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation: Data was collected over the time period 11/29/2001-11/12/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 49731, Nickel
San Dieguito River

Region 9

LOE ID: 75819

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]
Temporal Representation: Data was collected on a single day 6/3/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID 49721

Region 9

San Dieguito River

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the 27 samples exceed the criteria for Warm Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 27 samples exceed the criteria for Warm Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49721, Selenium

Region 9

San Dieguito River

LOE ID: 78114

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 27
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Selenium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]

Temporal Representation:

Data was collected over the time period 11/29/2001-11/12/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID

49723

Region 9

San Dieguito River

Pollutant:

Temperature, water

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Nine of the 32 samples exceed the Objective for Cold Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 32 samples exceeded the Objective for Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision

Recommendation:

Line of Evidence (LOE) for Decision ID 49723, Temperature, water

Region 9

San Dieguito River

LOE ID:

75827

Pollutant:

Temperature, water

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Cold Freshwater Habitat

Number of Samples:

32

Number of Exceedances:

9

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine of the 32 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected at the following stations: SGT-010-Del Mar- El Camino Real SGT-020-Solana Beach- Via De Santa Fe SGT-025-Lusardi Creek/ Artesian Rd SGT-028-Del Dios Hwy @ fruit stand
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	Quality Assurance Project Plan for San Diego Regional Water Quality Assessment and Outreach Project.

DECISION ID	49685	Region 9
San Dieguito River		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 samples exceed the criteria for Warm Freshwater Habitat beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the criteria for Warm Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 49685, Zinc

Region 9

San Dieguito River

LOE ID:	75837
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito Creek - 905_SMC00473]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 49685, Zinc

Region 9

San Dieguito River

LOE ID:	75831
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 1 monitoring site [San Dieguito River @ El Apajo (end)]
Temporal Representation:	Data was collected 6/10/2003 - 6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49685, Zinc

Region 9

San Dieguito River

LOE ID:	75838
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for San Dieguito River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]

Temporal Representation:

Data was collected over the time period 11/29/2001-11/12/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID

36832

Region 9

San Dieguito River

Pollutant:

Benthic Community Effects

Final Listing Decision:

List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:

Revision Status

Original

Sources:

Agriculture | Hydromodification | Illicit Connections/Illegal Hook-ups/Dry Weather Flows | Source Unknown | Unknown Nonpoint Source | Unknown Point Source | Urban Runoff/Storm Sewers

Expected TMDL Completion

2025

Date:

Impairment from Pollutant or

Pollutant

Pollution:

Regional Board Conclusion:

Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision

Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects

Region 9

San Dieguito River

LOE ID:

7312

Pollutant:

Phosphorus

LOE Subgroup:

Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Twelve of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. The Water Quality Control Plan goal for the San Diego Basin Goal is 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects
San Dieguito River

Region 9

LOE ID:	7492
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Ceriodaphnia dubia- Six of fifteen samples collected were found to be toxic as determined by the Ceriodaphnia dubia survival/reproductive test.
	Hyalella azteca- None of the fifteen samples collected were found to be toxic as determined by the Hyalella azteca survival test.
	Selenastrum capricornutum- Five of fifteen samples collected were found to be toxic as determined by the Selenastrum capricornutum growth test.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Weston Solutions quality assurance plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

**Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects
San Dieguito River**

Region 9

LOE ID:	24991
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Selenastrum capricornutum- (used for the 303(d) Listing) three samples were collected and three samples show significant toxicity levels (SL) and Compliant with QAPP as determined by the Selenastrum capricornutum growth test.
	Other Toxicity Tests: Ceriodaphnia dubia- Four samples were collected and two samples show significant toxicity levels (SL) as determined by the Ceriodaphnia dubia survival/reproductive test.
	Hyalella azteca- Two samples were collected and neither show significant toxicity levels (SL) as determined by the Hyalella azteca growth and survival test according to results in the Surface Water Ambient Monitoring Program Annual Progress Report, 2007. Samples were collected in January, April, May and September 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected at the monitoring station San Dieguito 9 (station id: 905SDSDQ9 lat/long: 32.97877/-117.23506), located on the main stem of the San Dieguito River.
Temporal Representation:	Samples were collected in January, April, May and September 2003.
Environmental Conditions:	
QAPP Information:	QA/QC conducted in accordance with the Surface Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects

Region 9

San Dieguito River

LOE ID:	7372
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on January 16, April 17, May 15 and September 9, 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring station San Dieguito 9 (station id: 905SDSDQ9 lat/long: 32.97877/-117.23506), located on the main stem of the San Dieguito River.
Temporal Representation:	Samples were collected on January 16, April 17, May 15 and September 9, 2003.
Environmental Conditions:	The above sampling events occurred during wet weather between storm events, wet weather high base flow, dry weather declining base flow, and dry weather minimum base flow, respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects**Region 9****San Dieguito River**

LOE ID:	7324
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirteen of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 2001 through 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects**Region 9****San Dieguito River**

LOE ID:	7373
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program, 2007. Samples were collected on January 16, April 17, May 15 and September 9, 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring station San Dieguito 9 (station id: 905SDSDQ9 lat/long: 32.97877/-117.23506), located on the main stem of the San Dieguito River.
Temporal Representation:	Samples were collected on January 16, April 17, May 15 and September 9, 2003.
Environmental Conditions:	The above sampling events occurred during wet weather between storm events, wet weather high base flow, dry weather declining base flow, and dry weather minimum base flow, respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects San Dieguito River

Region 9

LOE ID:	7313
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective. Since a maximum of four samples were collected at most in a one year period, any exceedance results in an annual exceedance frequency greater than 10% according to the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2001 to 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Basin Plan, concentrations of total dissolved solids cannot exceed 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects

Region 9

San Dieguito River

LOE ID:	27026
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Ten samples of IBI data were taken from October 2002 to May 2007 at one sampling site. Of the total number of samples, all ten of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: SD-DDH on San Dieguito Creek.
Temporal Representation:	Sampling occurred during May and October annually over a four year period from May 2003 to October 2006 and during October 2002 and May 2007.
Environmental Conditions:	

QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.

QAPP Information Reference(s): [Quality Assurance Manual for Freshwater Bioassessment Revision 0](#)

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects

Region 9

San Dieguito River

LOE ID: 75742

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 12
Number of Exceedances: 11

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Eleven of the twelve samples collected had IBI scores below 40. NPDES bioassessment
Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference:

Spatial Representation: The samples were collected at stations 905SDC-MLS, San Dieguito Creek; 905SDC-TWAS-2, San Pasqual Creek and SD-DDH, San Dieguito River. R9 suggest separating San Pasqual station from SD-DDH.

Temporal Representation: The samples were collected from October 2002 to May 2008.

Environmental Conditions:

QAPP Information: The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects

Region 9

San Dieguito River

LOE ID: 75752

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Dieguito River was collected at 2 monitoring sites [San Dieguito Creek - 905SDC-MLS, San Pasqual Creek - 905SDC-TWAS-2]
Temporal Representation:	Data was collected over the time period 11/30/2007-11/12/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects

Region 9

San Dieguito River

LOE ID:	75829
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	14
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-three samples were collected to test for toxicity. Fourteen of the 23 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included survival of <i>Hyalella azteca</i> , growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 905SDC-MLS San Dieguito Creek.
Temporal Representation:	The samples were collected from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects

Region 9

San Dieguito River

LOE ID:	79544
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	12 samples were taken at 3 stations along the San Dieguito River. Eight of twelve CSCI scores for this site are below the 0.79 threshold, and therefore are exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.

Spatial Representation:	The samples were collected at stations 905SSD-DDH SMC00473 905SDC-MLS
Temporal Representation:	The samples were collected from 2002 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

Line of Evidence (LOE) for Decision ID 36832, Benthic Community Effects	Region 9
San Dieguito River	

LOE ID:	75741
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 5.7. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at 905_SMC00473, San Dieguito Creek .
Temporal Representation:	The sample was collected in June 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

San Dieguito River

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: No new data was assessed this cycle. The decision has not changed and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 19 of the samples exceed the Basin Plan water quality objective for total nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixteen of 19 of the samples exceed the Basin Plan water quality objective for total nitrogen, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43093, Nitrogen

Region 9

San Dieguito River

LOE ID: 7373

Pollutant: Total Nitrogen as N
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Three of four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program, 2007. Samples were collected on January 16, April 17, May 15 and September 9, 2003.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial

uses.

A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Samples were collected at the monitoring station San Dieguito 9 (station id: 905SDSDQ9 lat/long: 32.97877/-117.23506), located on the main stem of the San Dieguito River.

Temporal Representation:

Samples were collected on January 16, April 17, May 15 and September 9, 2003.

Environmental Conditions:

The above sampling events occurred during wet weather between storm events, wet weather high base flow, dry weather declining base flow, and dry weather minimum base flow, respectively.

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43093, Nitrogen

Region 9

San Dieguito River

LOE ID: 7324

Pollutant: Total Nitrogen as N

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 15

Number of Exceedances: 13

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: Thirteen of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 2001 through 2006.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.

A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.

Temporal Representation: Samples were collected one to four times a year from 2001-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

DECISION ID	43138	Region 9
San Dieguito River		

Pollutant: Phosphorus

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Sources: Source Unknown

Expected TMDL Completion Date: 2021

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 19 of the samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixteen of 19 of the samples exceed the Basin Plan water quality objective for phosphorus, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43138, Phosphorus	Region 9
San Dieguito River	

LOE ID: 7372

Pollutant: Phosphorus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on January 16, April 17, May 15 and September 9, 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the monitoring station San Dieguito 9 (station id: 905SDSDQ9 lat/long: 32.97877/-117.23506), located on the main stem of the San Dieguito River.
Temporal Representation:	Samples were collected on January 16, April 17, May 15 and September 9, 2003.
Environmental Conditions:	The above sampling events occurred during wet weather between storm events, wet weather high base flow, dry weather declining base flow, and dry weather minimum base flow, respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

**Line of Evidence (LOE) for Decision ID 43138, Phosphorus
San Dieguito River**

Region 9

LOE ID:	7312
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Twelve of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to four times a year from 2001-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. The Water Quality Control Plan goal for the San Diego Basin Goal is 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID 43664		Region 9
San Dieguito River		
Pollutant:	Total Dissolved Solids	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2021	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Fifteen of 15 of the samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of 15 of the samples exceed the Basin Plan water quality objective for total dissolved solids, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.	

Line of Evidence (LOE) for Decision ID 43664, Total Dissolved Solids		Region 9
San Dieguito River		

LOE ID:	7313
Pollutant:	Total Dissolved Solids

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective. Since a maximum of four samples were collected at most in a one year period, any exceedance results in an annual exceedance frequency greater than 10% according to the San Diego County Municipal Copermittees Urban Runoff Monitoring Report, 2007. Samples were collected one to three times a year from 2001 to 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, concentrations of total dissolved solids cannot exceed 500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed behind the Morgan Run Golf Course maintenance shop along a natural channel off Via De La Valle.
Temporal Representation:	Samples were collected one to three times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Santa Gertrudis Creek](#)
Water Body ID: CAR9024200020080825001546
Water Body Type: River & Stream

DECISION ID	44673	Region 9
Santa Gertrudis Creek		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

Five line of evidence is available in the administrative record to assess this pollutant. Seven of the Seven samples exceed the Basin Plan water quality objective for escherichia coli, Seven out of Seven samples exceeded the Water Quality Objective for Fecal Coliform, and Two of the Two samples exceeded the Evaluation Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the Seven samples exceed the Basin Plan water quality objective for escherichia coli, Seven out of Seven samples exceeded the Water Quality Objective for Fecal Coliform, and Two of the Two samples exceeded the Evaluation Guideline for Total Coliform and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44673, Indicator Bacteria	Region 9
Santa Gertrudis Creek	

LOE ID: 7151
Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through February 2006.
Data Reference:	San Diego, CA., Riverside, CA.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The maximum E. coli level for moderately or lightly used areas is 406 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Santa Gertrudis Creek near Temecula. Lat/long: 33°31'28" N/117°09'50" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44673, Indicator Bacteria
Santa Gertrudis Creek

Region 9

LOE ID:	72781
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two samples exceeded the E. coli objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The maximum E. coli level for moderately or lightly used areas is 406 colonies per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Santa Gertrudis Creek.
Temporal Representation:	Samples were collected between November 2008 and December 2008.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44673, Indicator Bacteria	Region 9
Santa Gertrudis Creek	

LOE ID:	72780
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Total Coliform concentration shall not exceed more than 10000/100 ml. Guidance for Fresh Water Beaches (CDPH).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	The samples were collected at Santa Gertrudis Creek.
Temporal Representation:	Samples were collected between November 2008 and December 2008.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44673, Indicator Bacteria	Region 9
Santa Gertrudis Creek	

LOE ID:	72779
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Gertrudis Creek.
Temporal Representation:	Samples were collected between November 2008 and December 2008.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44673, Indicator Bacteria

Region 9

Santa Gertrudis Creek

LOE ID:	7402
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Santa Gertrudis Creek near Temecula. Lat/long: 33°31'28" N/117°09'50" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43057	Region 9
Santa Gertrudis Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the five samples exceed the objective and this exceeds the allowable frequency using table 3.1.
4. Pursuant to section of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43057, Nitrogen	Region 9
Santa Gertrudis Creek	

LOE ID:	7034
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of five samples exceeded the warm freshwater habitat water quality objective for Total Nitrogen in the Riverside County Flood Control and Water Conservation District annual monitoring report from 2005 and 2006. The five samples were collected between October 2004 and February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).</p> <p>desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Santa Gertrudis Creek near Temecula. Lat/long: 33°31'28" N/117°09'50" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	37136	Region 9
Santa Gertrudis Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of the nine samples exceed the Basin Plan water quality objective for chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. Seven of the nine samples exceed the Basin Plan water quality objective for chlorpyrifos and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 37136, Chlorpyrifos
Santa Gertrudis Creek**

Region 9

LOE ID:	7029
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Seven out of nine samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 4-day average concentration of chlorpyrifos in freshwater is 0.014 ug/L. The 1-hour average concentration of chlorpyrifos in freshwater is 0.025 ug/L according to Siepmann and Finlayson, 2000; Finlayson, 2004.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Samples were collected at Temecula Creek below Pala Road, lat/long: 33°28'26.4" N/117°07'46.1" W.
Temporal Representation:	Four to six samples are collected per monitoring year. Samples were collected from October 2004 through May 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, three samples represent wet weather and two samples represent dry weather. However, one sampling event in the 2004-2005 monitoring year did not analyze for all constituents.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID

43071

Region 9

Santa Gertrudis Creek

Pollutant: Copper
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the four samples exceed the Basin Plan water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the four samples exceed the Basin Plan water quality objective for copper and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43071, Copper

Region 9

Santa Gertrudis Creek

LOE ID: 7030

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Two out of four samples collected exceed the water quality objective for the 1-hour average concentration of copper. Two of four samples collected exceeds the water quality objective for the 4-day average concentration of copper according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through May 2006.

Data Reference: [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb, but these criteria may vary depending upon hardness of the sample (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Santa Gertrudis Creek near Temecula. Lat/long: 33°31'28" N/117°09'50" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43679	Region 9
Santa Gertrudis Creek		
Pollutant:	Iron	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2021	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Five of the five samples exceed the Basin Plan water quality objective for iron.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the five samples exceed the Basin Plan water quality objective for iron and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.	

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43679, Iron

Region 9

Santa Gertrudis Creek

LOE ID: 7031

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 5
Number of Exceedances: 5

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: All five of the samples exceeded the domestic or municipal supply water quality objective according to the results in Riverside County Flood Control and Water Conservation District annual monitoring program from 2005 and 2006. The five samples were collected between October 2004 and February 2006.

Data Reference: [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, inland surface waters designated as domestic or municipal supply, shall not contain concentrations of iron in excess of the secondary maximum contaminant level 0.3 mg/L (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Santa Gertrudis Creek near Temecula.
Lat/long: 33°31'28" N/117°09'50" W.

Temporal Representation: Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.

Environmental Conditions: One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

DECISION ID

44195

Region 9

Santa Gertrudis Creek

Pollutant: Manganese
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the five samples exceed the Basin Plan water quality objective for Manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the five samples exceed the Basin Plan water quality objective for Manganese and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

The Regional Board staff mistakenly assessed manganese as a conventional pollutant and applied table 3.2 of the listing Policy. Manganese is a toxicant and should be assessed using Table 3.1 . State Water Board staff has corrected this error and revised the recommendation to List for manganese as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the five samples exceed the water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of five samples exceeded the water quality objective for selenium and this exceeds the allowable frequency under Section 3.1 of the Listing Policy.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met..

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44195, Manganese
Santa Gertrudis Creek**

Region 9

LOE ID: 7033

Pollutant: Manganese
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of the five samples exceeded the water quality objective for Manganese in the Riverside County Flood Control and Water Conservation District annual monitoring reports from 2005 and 2006. The five samples were collected between October 2004 and February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, inland surface waters designated as domestic or municipal supply shall not contain concentrations of manganese in excess of the secondary maximum contaminant level 0.05 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Santa Gertrudis Creek near Temecula. Lat/long: 33°31'28" N/117°09'50" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43680	Region 9
Santa Gertrudis Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Five of the five samples exceed the Basin Plan water quality objective for phosphorus.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the five samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43680, Phosphorus
Santa Gertrudis Creek**

Region 9

LOE ID:	7036
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples exceeded the warm freshwater habitat water quality objective for Phosphorus according to results in the Riverside County Flood Control and Water Conservation annual monitoring report from 2005 and 2006. The five samples were collected between October 2004 and February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin Plan has a goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Santa Gertrudis Creek near Temecula. Lat/long: 33°31'28" N/117°09'50" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Switzer Creek](#)
Water Body ID: CAR9082200020080825092534
Water Body Type: River & Stream

DECISION ID	50201	Region 9
Switzer Creek		

Pollutant: Bifenthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50201, Bifenthrin	Region 9
Switzer Creek	

LOE ID: 76911
Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of LC50 values for bifenthrin from Amweg et al. (2005) and Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50460	Region 9
Switzer Creek		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. One of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeds the guideline and this sample size is insufficient to determine, with the

power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50460, Chlordane

Region 9

Switzer Creek

LOE ID:	72828
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	1 of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 908SUP095 (Switzer Creek @ Harbor).
Temporal Representation:	The samples were collected on 1/8/2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

50476

Region 9

Switzer Creek

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero samples exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50476, Chlorpyrifos

Region 9

Switzer Creek

LOE ID:	76912
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to

Guideline Reference:	significant figures as described in Beaulaurier et al., 2005). Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50205	Region 9
Switzer Creek		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50205, Cyfluthrin	Region 9
Switzer Creek	

LOE ID:	76913
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50435	Region 9
Switzer Creek		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50435, Cyhalothrin, Lambda Switzer Creek

Region 9

LOE ID:	76914
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID 50437
Switzer Creek

Region 9

Pollutant: Cypermethrin

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50437, Cypermethrin
Switzer Creek

Region 9

LOE ID: 76915

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50467		Region 9
Switzer Creek		
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 50467, DDE (Dichlorodiphenyldichloroethylene)		Region 9
Switzer Creek		

LOE ID:	76927
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE (o,p' + p,p') is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50469	Region 9
Switzer Creek		
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of one sample exceeds the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50469, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Switzer Creek

LOE ID:	76961
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs (Sum DDT + Sum DDD + Sum DDE) is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50469, DDT (Dichlorodiphenyltrichloroethane)

Region 9

Switzer Creek

LOE ID:	76928
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT (o,p' + p,p') is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50438	Region 9
Switzer Creek		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the
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power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50438, Deltamethrin

Region 9

Switzer Creek

LOE ID:	76929
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID

50477

Region 9

Switzer Creek

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50477, Diazinon

Region 9

Switzer Creek

LOE ID: 76930

Pollutant: Diazinon
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a

Guideline Reference: continuous concentration (Finlayson, 2004).
[Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]

Temporal Representation: Data was collected on a single day 1/8/2007.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID	50472	Region 9
Switzer Creek		

Pollutant: Dieldrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50472, Dieldrin	Region 9
Switzer Creek	

LOE ID: 76943

Pollutant: Dieldrin
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50474	Region 9
Switzer Creek		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 50474, Endrin	Region 9
Switzer Creek	

LOE ID:	76944
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50447	Region 9
Switzer Creek		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50447, Esfenvalerate/Fenvalerate
Switzer Creek**

Region 9

LOE ID:	76945
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

**DECISION ID 50450
Switzer Creek**

Region 9

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50450, Fenpropathrin**Region 9****Switzer Creek**

LOE ID:	76946
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Å–92.

Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50487	Region 9
Switzer Creek		

Pollutant:	Fipronil
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero samples exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50487, Fipronil	Region 9
Switzer Creek	

LOE ID:	76947
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50488	Region 9
Switzer Creek		

Pollutant:	Fipronil Sulfide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero samples exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50488, Fipronil Sulfide
Switzer Creek**

Region 9

LOE ID:	76957
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

**DECISION ID 50489
Switzer Creek**

Region 9

Pollutant: Fipronil Sulfone
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero samples exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50489, Fipronil Sulfone

Region 9

Switzer Creek

LOE ID: 76958

Pollutant: Fipronil Sulfone
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50475	Region 9
Switzer Creek		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50475, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Switzer Creek	

LOE ID: 76959

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID	50454	Region 9
Switzer Creek		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50454, Permethrin, total
Switzer Creek**

Region 9

LOE ID:	76960
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version).

DECISION ID
Switzer Creek

53493

Region 9

Pollutant: **Toxicity**

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One lines of evidence are available in the administrative record to assess this pollutant. One of one sediment sample exhibited sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the one sediment sample exceed the GUIDELINE for toxicity and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53493, Toxicity
Switzer Creek

Region 9

LOE ID: 76973

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of *Hyalella azteca*. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: [Statewide Project Urban Pyrethroid Status Monitoring](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted using the significant effect code: S equals significant, SG equals significantly greater and SL equals significantly lower. If a sample has any one of these codes, it will be considered an exceedance.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI, U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The sample was collected at station 908SUP095 .
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID	42789	Region 9
Switzer Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the California Toxics Rule water quality objective for Arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the California Toxics Rule water quality objective for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42789, Arsenic	Region 9
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Switzer Creek

LOE ID:	7048
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the three samples exceed the water quality objective.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Arsenic water quality objective for maximum freshwater concentration is 340 ug/L and continuous freshwater concentration is 150 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station in Switzer Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID	43228	Region 9
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Switzer Creek

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of three samples exceed the California Toxics Rule water quality objective for Cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of three samples exceed the California Toxics Rule water quality objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43228, Cadmium

Region 9

Switzer Creek

LOE ID:	7158
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the three samples taken during storm events in 2007 for the Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern exceed the water quality objective for Cadmium.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, Cadmium water quality objective for maximum freshwater concentration is 4.3 ug/L and continuous freshwater concentration is 2.2 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station in Switzer Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID

38166

Region 9

Switzer Creek

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the three samples exceed the California Toxics Rule water quality objective for Chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the three samples exceed the California Toxics Rule water quality objective for Chromium. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38166, Chromium

Region 9

Switzer Creek

LOE ID: 7053

Pollutant: Chromium (total)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: None of the three samples taken during storm events in 2007 for the Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, exceeded the water quality objective for Chromium.

Data Reference: [Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the CTR, the Chromium water quality objective for maximum freshwater concentration is 16 ug/L and continuous freshwater concentration is 11 ug/L (U.S. EPA, 2000).

Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:	Samples were collected at 1 monitoring station in Switzer Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID	50464	Region 9
Switzer Creek		

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeds the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeds the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50464, DDD (Dichlorodiphenyldichloroethane)	Region 9
Switzer Creek	

LOE ID:	76926
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Switzer Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD (o,p' + p,p') is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Switzer Creek was collected at 1 monitoring site [Switzer Creek @ Harbor - 908SUP095]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	43063	Region 9
Switzer Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the three samples exceeded the nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 43063, Nickel

Region 9

Switzer Creek

LOE ID:	7155
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the three samples exceed the chronic water quality objectives as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Nickel water quality objective for maximum freshwater concentration is 460 ug/L and continuous freshwater concentration is 52 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station in Switzer Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID

43031

Region 9

Switzer Creek

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. All three of the samples exceed the California Toxics Rule water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three of the samples exceed the California Toxics Rule water quality objective for copper, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43031, Copper
Switzer Creek**

Region 9

LOE ID:	7052
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All three samples exceeded the chronic water quality objective for copper.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Copper water quality objective for maximum freshwater concentration is 14 ug/L and continuous freshwater concentration is 9 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station in Switzer Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

DECISION ID 43239
Switzer Creek

Region 9

Pollutant:	Lead
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. All three of the samples exceed the California Toxics Rule water quality objective for lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three of the samples exceed the California Toxics Rule water quality objective for lead, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43239, Lead Switzer Creek

Region 9

LOE ID:	7154
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All three samples exceed the chronic water quality objective for lead.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Lead water quality objective for maximum freshwater concentration is 82 ug/L and continuous freshwater concentration is 3 ug/L (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 1 monitoring station in Switzer Creek.
Temporal Representation: Samples were collected during 3 storm events in 2006.
Environmental Conditions: Samples were collected during wet weather.
QAPP Information: QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):

DECISION ID	43294	Region 9
Switzer Creek		

Pollutant:	Zinc
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the 3 samples exceed the California Toxics Rule criteria for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 3 samples exceed the California Toxics Rule criteria for Zinc and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43294, Zinc	Region 9
Switzer Creek	

LOE ID:	7156
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of three samples exceed the acute and chronic water quality objectives as outlined in Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, 2007.
Data Reference:	Monitoring and Modeling of Chollas, Switzer, and Paleta Creek, Southern California Coastal Water Research Project
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the Lead water quality objective in for maximum and continuous freshwater concentration is 120 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 1 monitoring station in Switzer Creek.
Temporal Representation:	Samples were collected during 3 storm events in 2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to 40 CFR 136.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Warm Springs Creek \(Riverside County\)](#)
Water Body ID: CAR9023300020080825005933
Water Body Type: River & Stream

DECISION ID 42792 **Region 9**
Warm Springs Creek (Riverside County)

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. With the latest data, at least six of seven single samples exceed the water quality objectives for E. Coli., and fecal coliform for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, at least six of seven single samples exceed the water quality objectives for E. Coli., and fecal coliform for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42792, Indicator Bacteria **Region 9**
Warm Springs Creek (Riverside County)

LOE ID: 72776
Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two samples exceeded the E. coli objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E.Coli concentration shall not exceed more than 235/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Warm Springs Creek.
Temporal Representation:	Samples were collected between November 2008 and December 2008.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42792, Indicator Bacteria

Region 9

Warm Springs Creek (Riverside County)

LOE ID:	72777
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Warm Springs Creek.
Temporal Representation:	Samples were collected between November 2008 and December 2008.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42792, Indicator Bacteria

Region 9

Warm Springs Creek (Riverside County)

LOE ID:	7182
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four out of five samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Warm Springs Creek near Murrieta. Lat/long: 33°31'56" N/117°10'34" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42792, Indicator Bacteria**Region 9****Warm Springs Creek (Riverside County)**

LOE ID:	7404
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four out of five samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through May 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	The maximum E. coli level for moderately or lightly used areas is 406 colonies per 100 ml. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Warm Springs Creek near Murrieta. Lat/long: 33°31'56" N/117°10'34" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42792, Indicator Bacteria	Region 9
Warm Springs Creek (Riverside County)	

LOE ID:	72778
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Total Coliform concentration shall not exceed more than 10000/100 ml. Guidance for Fresh Water Beaches (CDPH).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	The samples were collected at Warm Springs Creek.
Temporal Representation:	Samples were collected between November 2008 and December 2008.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Warm Springs Creek (Riverside County)

Pollutant: Chlorpyrifos
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of four of the samples exceed the Basin Plan water quality objective for chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of four of the samples exceed the Basin Plan water quality objective for chlorpyrifos and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44683, Chlorpyrifos Warm Springs Creek (Riverside County)

Region 9

LOE ID: 7037

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Three of four samples exceeded the warm freshwater habitat water quality objective for Chlorpyrifos in the Riverside County Flood Control and Water Conservation District annual progress reports from 2005 and 2006. Four samples were collected between October 2004 and February 2006.

Data Reference: [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 4-day average concentration of chlorpyrifos in freshwater is 0.014 ug/L. The 1-hour average concentration of chlorpyrifos in freshwater is 0.025 ug/L according to Siepmann and Finlayson, 2000; Finlayson, 2004.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Samples were collected at Warm Springs Creek near Murrieta. Lat/long: 33°31'56" N/117°10'34" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	42738	Region 9
Warm Springs Creek (Riverside County)		

Pollutant:	Iron
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Five of the five samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 5 samples exceed the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 42738, Iron
Warm Springs Creek (Riverside County)**

Region 9

LOE ID:	7038
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples, from results in the Riverside County Flood Control and Water Conservation District annual progress reports from 2005 and 2006, exceeded the water quality objective for Iron. Five samples were collected between October 2004 and February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, inland surface waters designated as domestic or municipal supply, shall not contain concentrations of iron in excess of the secondary maximum contaminant level 0.3 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Warm Springs Creek near Murrieta. Lat/long: 33°31'56" N/117°10'34" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

**DECISION ID 44590
Warm Springs Creek (Riverside County)**

Region 9

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Two of three of the samples exceed the Basin Plan water quality objective for manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of three of the samples exceed the Basin Plan water quality objective for manganese and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44590, Manganese
Warm Springs Creek (Riverside County)**

Region 9

LOE ID: 7040

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Two of three samples exceeded the warm freshwater habitat water quality objective for Manganese in the Riverside County Flood Control and Water Conservation District annual progress reports from 2005 and 2006. Three samples were collected between October 2004 and March 2005.

Data Reference: [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Basin Plan, inland surface waters designated as domestic or municipal supply shall not contain concentrations of manganese in excess of the secondary maximum contaminant level 0.05 mg/L (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Warm Springs Creek near Murrieta.

Lat/long: 33°31'56" N/117°10'34" W.

Temporal Representation:

Two to three samples were collected per monitoring year. Samples were collected from October 2004 through March 2005.

Environmental Conditions:

One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.

QAPP Information:

QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

DECISION ID	43143	Region 9
Warm Springs Creek (Riverside County)		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Five of the five samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of five samples exceed the objective, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43143, Nitrogen	Region 9
Warm Springs Creek (Riverside County)	

LOE ID:	7041
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples exceeded the warm freshwater habitat water quality objective for Total Nitrogen in the Riverside County Flood Control and Water Conservation District annual progress reports from 2005 and 2006. Five samples were collected between October 2004 and February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007)
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Warm Springs Creek near Murrieta. Lat/long: 33°31'56" N/117°10'34" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	32587	Region 9
Warm Springs Creek (Riverside County)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Five of the five samples exceed the Basin Plan water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the five samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 32587, Phosphorus
Warm Springs Creek (Riverside County)**

Region 9

LOE ID:	7042
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All five samples exceeded the warm freshwater habitat water quality objective for Phosphorus in the Riverside County Flood Control and Water Conservation District annual progress reports from 2005 and 2006. Five samples were collected between October 2004 and February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Warm Springs Creek near Murrieta. Lat/long: 33°31'56" N/117°10'34" W.
Temporal Representation:	Two to three samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the

QAPP Information:

QAPP Information Reference(s):

monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, only one dry event was monitored in the 2004-2005 monitoring year and no dry events in the 2005-2006 monitoring year due to low flow. QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Poway Creek](#)
Water Body ID: CAR9062000020080904172636
Water Body Type: River & Stream

DECISION ID	43500	Region 9
Poway Creek		

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the water quality objective for total nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All four samples exceeded the total nitrogen water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43500, Nitrogen	Region 9
Poway Creek	

LOE ID: 21388
Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Poway Creek Station 906LPPOW2 from March 2002 to September 2002 and they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - four of the four samples. Ceriodaphnia dubia survival/reproductive test - one of the four samples. Hyalella Azteca growth/survival test - three of the four samples. Results were from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Poway Creek Station 906LPPOW2; (Latitude 32.95173, Longitude -117.04766).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43500, Nitrogen

Region 9

Poway Creek

LOE ID:	7576
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four water samples were collected at Poway Creek station 906LPPOW2 in March, April, June, and September 2002. All four samples showed excessive nitrogen concentrations according to results in California's Surface Water Ambient Monitoring Program, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are

approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Samples were collected at Poway Creek station (906LPPOW2); (Latitude 32.952, Longitude -117.046).

Temporal Representation:

Samples were collected on March, April, June, and September 2002.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID	43499	Region 9
Poway Creek		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the samples exceed the water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. All three samples exceed the selenium water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43499, Selenium	Region 9
Poway Creek	

LOE ID:	7577
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected at Poway Creek station 906LPPOW2 in March, April, and June 2002. All three samples showed excessive selenium concentrations according to results from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule, 40 CFR Part 131, U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Water samples were collected at Poway Creek station 906LPPOW2; (Latitude 32.95182, Longitude -117.046955).
Temporal Representation:	Samples were collected on March, April, and June 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43499, Selenium

Region 9

Poway Creek

LOE ID:	21388
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Poway Creek Station 906LPPOW2 from March 2002 to September 2002 and they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - four of the four samples. Ceriodaphnia dubia survival/reproductive test - one of the four samples. Hyalella Azteca growth/survival test - three of the four samples. Results were from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Poway Creek Station 906LPPOW2; (Latitude 32.95173, Longitude -117.04766).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	44462	Region 9
Poway Creek		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the samples exceed the water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All four samples exceed the toxicity water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44462, Toxicity	Region 9
Poway Creek	

LOE ID:	21388
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Poway Creek Station 906LPPOW2 from March 2002 to September 2002 and they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - four of the four samples. Ceriodaphnia dubia survival/reproductive test - one of the four samples. Hyalella Azteca growth/survival test - three of the four samples. Results were from California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold (EPA, 2002).
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Poway Creek Station 906LPPOW2; (Latitude 32.95173, Longitude -117.04766).
Temporal Representation:	Samples were collected on March, April, June, and September 2002.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Redhawk Channel](#)
Water Body ID: CAR9025100020080904171327
Water Body Type: River & Stream

DECISION ID	43592	Region 9
Redhawk Channel		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 7 of 9 single samples exceed the water quality objective for E. Coli. of 235/100ml and for fecal coliform of 400/100ml for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 7 of 9 single samples exceed the water quality objective for E. Coli. of 235/100ml and for fecal coliform of 400/100ml for the protection of REC-1 and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43592, Indicator Bacteria	Region 9
Redhawk Channel	

LOE ID: 72786
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the two samples exceeded the fecal coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Redhawk Channel.
Temporal Representation:	Samples were collected between November 2008 and June 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43592, Indicator Bacteria

Region 9

Redhawk Channel

LOE ID:	72785
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the two samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Total Coliform concentration shall not exceed more than 10000/100 ml. Guidance for Fresh Water Beaches (CDPH).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	The samples were collected at Redhawk Channel.
Temporal Representation:	Samples were collected between November 2008 and June 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43592, Indicator Bacteria**Region 9****Redhawk Channel**

LOE ID:	72787
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the two samples exceeded the E. coli objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E.Coli concentration shall not exceed more than 235/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Redhawk Channel.
Temporal Representation:	Samples were collected between November 2008 and June 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43592, Indicator Bacteria**Region 9****Redhawk Channel**

LOE ID:	7466
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All seven samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The maximum E. coli level for moderately or lightly used areas is 406 colonies per 100 ml (RWQCB, 2007).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.
Temporal Representation:	Three to four samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, two dry events were monitored in the 2004-2005 monitoring year and one dry event in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43592, Indicator Bacteria

Region 9

Redhawk Channel

LOE ID:	7465
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All seven samples collected exceed the water quality objective according to the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through February 2006. .
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.
Temporal Representation:	Three to four samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, two dry events were monitored in the 2004-2005 monitoring year and one dry event in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53338, Oxygen, Dissolved	Region 9
Redhawk Channel	

LOE ID:	75521
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 4 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the Redhawk Channel Station.
Temporal Representation: Samples were collected four times between 2007 and 2009.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

DECISION ID	50052	Region 9
Redhawk Channel		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the Four samples exceed the Water Quality Objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of Four samples exceeded the Water Quality Objective for pH for and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50052, pH	Region 9
Redhawk Channel	

LOE ID:	75522
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 4 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Red Hawk Channel station.
Temporal Representation:	Samples were collected approximately once a year from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	43085	Region 9
Redhawk Channel		

Pollutant:	Chlorpyrifos
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Seven of eight of the samples exceed the Basin Plan water quality objective for chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of eight of the samples exceed the Basin Plan water quality objective for chlorpyrifos, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Redhawk Channel

LOE ID:	7467
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four out of four wet weather samples collected exceed the water quality objective of 0.025 ug/L. Three out of four dry weather samples exceed 0.014 ug/L according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through February 2006.
Data Reference:	Water Quality Control Plan for the San Diego Basin
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 4-day average concentration of chlorpyrifos in freshwater is 0.014 ug/L. The 1-hour average concentration of chlorpyrifos in freshwater is 0.025 ug/L according to Siepmann and Finlayson, 2000; Finlayson, 2004.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.
Temporal Representation:	Three to five samples were collected per monitoring year. Samples were collected from July 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID

43600

Region 9

Redhawk Channel

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2021

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of eight of the samples exceed the California Toxic Rule water quality objective for copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of eight of the samples exceed the California Toxic Rule water quality objective for copper, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43600, Copper Redhawk Channel

Region 9

LOE ID:	7468
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two out of four wet weather samples collected exceed the water quality objective for the 1-hour average concentration of copper. None of four dry weather samples collected exceeds the water quality objective for the 4-day average concentration of copper according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb, but these criteria may vary depending upon hardness of the sample (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.

Temporal Representation:

Three to five samples were collected per monitoring year. Samples were collected from July 2004 through February 2006.

Environmental Conditions:

One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow. QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information:

QAPP Information Reference(s):

DECISION ID	43668	Region 9
Redhawk Channel		

Pollutant:	Diazinon
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. Two of eight of the samples exceed the Basin Plan water quality objective for Dianzinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Two of eight of the samples exceed the Basin Plan water quality objective for Dianzinon, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43668, Diazinon	Region 9
Redhawk Channel	

LOE ID:	7469
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two out of eight samples collected exceed the water quality objective; these two exceedances occurred within a one year period according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments of biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organism (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The one-hour average concentration of diazinon should not exceed 0.17 Åµg/L more than once every three years on the average (acute criterion) and the four-day average concentration of diazinon should not exceed 0.17 Åµg/L more than once every three years on the average (chronic criterion). (U.S. EPA, 2006)
Guideline Reference:	Fact Sheet: Final Recommended Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33Å°28Å'34.6Å" N/117Å°05Å'40.8Å" W.
Temporal Representation:	Three to five samples were collected per monitoring year. Samples were collected from July 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43204	Region 9
Redhawk Channel		
Pollutant:	Iron	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)	
Revision Status	Original	
Sources:	Natural Sources Source Unknown	
Expected TMDL Completion Date:	2019	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	The decision has not changed from the previous listing cycle. No new data were assessed for the	

current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Five of six of the samples exceed the Basin Plan water quality objective for iron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of six of the samples exceed the Basin Plan water quality objective for iron, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43204, Iron

Region 9

Redhawk Channel

LOE ID:	7470
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five out of six samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006, Samples were collected from October 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, inland surface waters designated as domestic or municipal supply, shall not contain concentrations of iron in excess of the secondary maximum contaminant level 0.3 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.
Temporal Representation:	Two to four samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the

QAPP Information:

QAPP Information Reference(s):

monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow. QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

DECISION ID	43669	Region 9
Redhawk Channel		

Pollutant:	Manganese
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Six of six of the samples exceed the Basin Plan water quality objective for manganese.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of six of the samples exceed the Basin Plan water quality objective for manganese, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43669, Manganese	Region 9
Redhawk Channel	

LOE ID:	7471
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6

Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All six samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, inland surface waters designated as domestic or municipal supply shall not contain concentrations of manganese in excess of the secondary maximum contaminant level 0.05 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.
Temporal Representation:	Two to four samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43644	Region 9
Redhawk Channel		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. (with update to table 3.1)</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Six of seven of the samples exceed the Basin Plan water quality objective for nitrogen.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of seven of the samples exceed the Basin Plan water quality objective for nitrogen, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43644, Nitrogen

Region 9

Redhawk Channel

LOE ID: 7473

Pollutant: Total Nitrogen as N

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7

Number of Exceedances: 6

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: Six out of seven samples collected exceed the evaluation guideline of 1 mg/L according to the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through February 2006.

Data Reference: [Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).

A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.

Temporal Representation: Three to five samples were collected per monitoring year. Samples collected in July 2004 through February 2006.

Environmental Conditions: One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES

permit.

QAPP Information Reference(s):

DECISION ID	43113	Region 9
Redhawk Channel		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of seven of the samples exceed the Basin Plan water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Seven of seven of the samples exceed the Basin Plan water quality objective for phosphorus, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43113, Phosphorus	Region 9
Redhawk Channel	

LOE ID:	7474
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All seven samples collected exceed the evaluation guideline according to the Riverside

Data Reference:	County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from July 2004 through February 2006. Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin has a goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.
Temporal Representation:	Three to five samples were collected per monitoring year. Samples collected in July 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

DECISION ID	43114	Region 9
Redhawk Channel		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Six of nine of the samples exceed the Basin Plan water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of nine of the samples exceed the Basin Plan water quality objective for total dissolved solids and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43114, Total Dissolved Solids
Redhawk Channel**

Region 9

LOE ID:	7472
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Six out of nine samples collected exceed the water quality objective according to results in the Riverside County Flood Control and Water Conservation District annual progress report from 2005 and 2006. Samples were collected from October 2004 through February 2006.
Data Reference:	Watershed Annual Progress Report 2004 to 2005 and 2005 to 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, inland surface waters designated as domestic or municipal supply, shall not contain concentrations of iron in excess of the secondary maximum contaminant level 0.3 mg/L (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Redhawk Channel downstream of Overland Dr. Lat/long: 33°28'34.6" N/117°05'40.8" W.
Temporal Representation:	Two to four samples were collected per monitoring year. Samples were collected from October 2004 through February 2006.
Environmental Conditions:	One sample represents the first storm event of each monitoring year that produces sufficient flow to collect a composite sample. In addition, another sample is collected during the monitoring year to represent a wet weather event. Two dry sampling events are also required each monitoring year; however, three dry events were monitored in the 2004-2005 monitoring year and only one dry event in the 2005-2006 monitoring year due to low flow.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Telegraph Canyon Creek](#)
Water Body ID: CAR9091100020081010151336
Water Body Type: River & Stream

DECISION ID	44159	Region 9
Telegraph Canyon Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 1 of 1 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 1 of 1 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met as California Stream Condition Index scores were not calculated for prior listing cycles.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44159, Benthic Community Effects	Region 9
Telegraph Canyon Creek	

LOE ID: 26471
Pollutant: Benthic Community Effects

LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One samples of IBI data were taken on November 2005 at one sampling site. Of the total number of samples, the one sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 909TCCAHP on Telegraph Canyon Creek.
Temporal Representation:	Sampling occurred during one event on November 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID	32905	Region 9
Telegraph Canyon Creek		
Pollutant:	Nitrogen	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2027	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.	

One line of evidence are available in the administrative record to assess this pollutant. Four of four samples exceed the water quality objective for biostimulatory substances.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceed the water quality objectives for biostimulatory substances and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 32905, Nitrogen
Telegraph Canyon Creek**

Region 9

LOE ID:	26151
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of four samples collected at Telegraph Canyon Creek station (908PTEL02) from May 2005 to April 2006 show excessive nitrogen concentrations according to results of California's SWAMP (2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Telegraph Canyon Creek station (908PTEL02); (Latitude -117.06288, Longitude 32.62860).
Temporal Representation:	Samples was collected in May 2005; September 2005; January 2006; and April 2006.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

DECISION ID	32596	Region 9
Telegraph Canyon Creek		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Four of four of the samples exceed the California Toxics Rule water quality objective for selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Four of four of the samples exceed the California Toxics Rule water quality objective for selenium and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32596, Selenium	Region 9
Telegraph Canyon Creek	

LOE ID:	26152
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality:	Four of four samples collected at Telegraph Canyon Creek station (908PTEL02) from May 2005 to April 2006 show excessive selenium concentrations according to results of California's SWAMP (2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Telegraph Canyon Creek station (908PTEL02); (Latitude -117.06288, Longitude 32.62860).
Temporal Representation:	Samples was collected in May 2005; September 2005; January 2006; and April 2006.
Environmental Conditions:	
QAPP Information:	Puckett, M. 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Jamul Creek](#)
Water Body ID: CAR9103300020081031153832
Water Body Type: River & Stream

DECISION ID	47968	Region 9
Jamul Creek		

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Aluminum.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Aluminum and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47968, Aluminum	Region 9
Jamul Creek	

LOE ID: 73953
Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	47971	Region 9
Jamul Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Two samples exceed the California Toxics Rule Objective for Arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Two samples exceeded the California Toxics Rule Objective for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47971, Arsenic

Region 9

Jamul Creek

LOE ID:	73955
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 47971, Arsenic

Region 9

Jamul Creek

LOE ID:	73956
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48003	Region 9
Jamul Creek		

Pollutant:	Azinphos-methyl (Guthion)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Azinphos-methyl (Guthion).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Water Quality Criteria for Azinphos-methyl (Guthion) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48003, Azinphos-methyl (Guthion)	Region 9
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Jamul Creek

LOE ID:	78052
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for Azinphos Methyl (Guthion) for the protection of freshwater aquatic life is a maximum of 0.01 ug/l.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48008

Region 9

Jamul Creek

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Barium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Barium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48008, Barium

Region 9

Jamul Creek

LOE ID:	73957
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Barium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for barium is 1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48010

Region 9

Jamul Creek

Pollutant:

Beryllium

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Beryllium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline Beryllium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48010, Beryllium

Region 9

Jamul Creek

LOE ID:	73958
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Beryllium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for beryllium is 0.004 mg/L 9 (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48015	Region 9
Jamul Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48015, Cadmium		Region 9
Jamul Creek		

LOE ID:	73963
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48015, Cadmium

Region 9

Jamul Creek

LOE ID:	73961
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura

Temporal Representation:	Creek @ Otay Lakes Rd. - 9100TY03]
Environmental Conditions:	Data was collected over the time period 2/6/2009-3/31/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48015, Cadmium

Region 9

Jamul Creek

LOE ID:	73960
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected once yearly from 2003 to 2006 and in 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48015, Cadmium

Region 9

Jamul Creek

LOE ID:	73959
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected once yearly from 2003 to 2006 and in 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48017	Region 9
Jamul Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Two samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48017, Chlorpyrifos
Jamul Creek**

Region 9

LOE ID:	78053
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**Line of Evidence (LOE) for Decision ID 48017, Chlorpyrifos
Jamul Creek**

Region 9

LOE ID:	78044
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48017, Chlorpyrifos

Region 9

Jamul Creek

LOE ID:	73921
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

[of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation: Data was collected over the time period 5/9/2006-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48017, Chlorpyrifos

Region 9

Jamul Creek

LOE ID: 78045

Pollutant: Chlorpyrifos

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation: Data was collected over the time period 5/9/2006-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

48018

Region 9

Jamul Creek

Pollutant: Chromium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the California Toxics Rule Objective for Chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the California Toxics Rule Objective for Chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48018, Chromium

Region 9

Jamul Creek

LOE ID: 73922

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd. - 910OTY03]

Temporal Representation:

Data was collected over the time period 2/6/2009-3/31/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID	48019	Region 9
Jamul Creek		

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48019, Copper	Region 9
Jamul Creek	

LOE ID: 73924
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected once yearly from 2003 to 2006 and in 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48019, Copper

Region 9

Jamul Creek

LOE ID:	73923
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected once yearly from 2003 to 2006 and in 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48019, Copper

Region 9

Jamul Creek

LOE ID:	73925
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd. - 910OTY03]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48019, Copper

Region 9

Jamul Creek

LOE ID:	73926
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48020	Region 9
Jamul Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 16.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48020, Diazinon
Jamul Creek**

Region 9

LOE ID:	73927
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 48020, Diazinon
Jamul Creek**

Region 9

LOE ID:	78047
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48020, Diazinon

Region 9

Jamul Creek

LOE ID:	78048
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48020, Diazinon

Region 9

Jamul Creek

LOE ID:	78046
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48021

Region 9

Jamul Creek

Pollutant:	Dimethoate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dimethoate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dimethoate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48021, Dimethoate**Region 9****Jamul Creek**

LOE ID: 77774

Pollutant: Dimethoate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Department of Health Services archived advisory level for dimethoate is 1 µg/L.

Guideline Reference: [CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently considered Notification Levels.](#)

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura

Temporal Representation:	Creek @ Otay Lakes Rd.]
Environmental Conditions:	Data was collected on a single day 3/31/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48021, Dimethoate
Jamul Creek

Region 9

LOE ID:	77775
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID
Jamul Creek

48022

Region 9

Pollutant:	Disulfoton
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Disulfoton.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Disulfoton and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48022, Disulfoton

Region 9

Jamul Creek

LOE ID:	77777
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for disulfoton is 0.05 µg/L (US EPA 1973 guidance).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

**Line of Evidence (LOE) for Decision ID 48022, Disulfoton
Jamul Creek**

Region 9

LOE ID: 77776

Pollutant: Disulfoton
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory level for disulfoton is 0.7 µg/L for life-time health protection.

Guideline Reference: [2011 Edition of the Drinking Water Standards and Health Advisories](#)

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation: Data was collected on a single day 3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

**DECISION ID 48024
Jamul Creek**

Region 9

Pollutant: Ethoprop
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Ethoprop.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Ethoprop and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48024, Ethoprop

Region 9

Jamul Creek

LOE ID:	77778
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

DECISION ID	48023	Region 9
Jamul Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Three of the Seven samples exceed the Single Sample Maximum Objective for Enterococcus, Zero of Seven samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Zero out of Seven samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the Seven samples exceed the Single Sample Maximum Objective for Enterococcus, Zero of Seven samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Zero out of Seven samples exceeded the Single Sample Maximum Guideline for Total Coliform, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48023, Indicator Bacteria	Region 9
Jamul Creek	

LOE ID: 73947

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use: Water Contact Recreation

Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine

	beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48023, Indicator Bacteria

Region 9

Jamul Creek

LOE ID:	73948
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 7/2/2003-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48023, Indicator Bacteria

Region 9

Jamul Creek

LOE ID: 73932

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation: Data was collected over the time period 2/6/2009-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 48023, Indicator Bacteria

Region 9

Jamul Creek

LOE ID: 73928

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 7/2/2003-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48023, Indicator Bacteria Jamul Creek

Region 9

LOE ID:	73929
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Enterococci.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48023, Indicator Bacteria**Region 9****Jamul Creek**

LOE ID:	73930
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 7/2/2003-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48023, Indicator Bacteria**Region 9****Jamul Creek**

LOE ID:	73931
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48026	Region 9
Jamul Creek		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a _____ line(s) of evidence are necessary to assess listing status.

[NUMBER] lines of evidence are available in the administrative record to assess this pollutant.
[NUMBER] of the [NUMBER] samples exceed the [OBJECTIVE/GUIDELINE/CRITERIA].

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [NUMBER] of [NUMBER] samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of ____ samples is needed to determine if a beneficial use is fully supported using table ____.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 48026, Iron	Region 9
Jamul Creek	

LOE ID: 73933

Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Iron.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48027	Region 9
Jamul Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Seven samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully

supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48027, Lead

Region 9

Jamul Creek

LOE ID:	73935
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected once yearly from 2003 to 2006 and in 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48027, Lead

Region 9

Jamul Creek

LOE ID:	73936
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd. - 9100TY03]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48027, Lead

Region 9

Jamul Creek

LOE ID:	73934
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation: Data was collected once yearly from 2003 to 2006 and in 2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48028	Region 9
Jamul Creek		

Pollutant: Malathion

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48028, Malathion	Region 9
Jamul Creek	

LOE ID: 78050

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48028, Malathion

Region 9

Jamul Creek

LOE ID:	78049
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories

Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48028, Malathion

Region 9

Jamul Creek

LOE ID:	73937
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48028, Malathion

Region 9

Jamul Creek

LOE ID:	78051
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48029	Region 9
Jamul Creek		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the Two samples exceed the California Toxics Rule Objective for Manganese.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of Two samples exceeded the California Toxics Rule Objective for Manganese and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48029, Manganese

Region 9

Jamul Creek

LOE ID:	73938
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Manganese.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48070

Region 9

Jamul Creek

Pollutant:	Methidathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Methidathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Methidathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48070, Methidathion

Region 9

Jamul Creek

LOE ID:	77780
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

Watersheds Report was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 48070, Methidathion
Jamul Creek

Region 9

LOE ID: 77779

Pollutant: Methidathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 7 µg/L.

Guideline Reference: [IRIS Database Calculations \(summary\)](#)

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation: Data was collected on a single day 3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID

48075

Region 9

Jamul Creek

Pollutant: Methyl Parathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the

One samples exceed the Water Quality Criteria for Methyl Parathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Methyl Parathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48075, Methyl Parathion

Region 9

Jamul Creek

LOE ID:	77781
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

DECISION ID	48085	Region 9
Jamul Creek		

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the California Toxics Rule Objective for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48085, Nickel	Region 9
Jamul Creek	

LOE ID: 73940

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.

Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48085, Nickel

Region 9

Jamul Creek

LOE ID:	73939
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd. - 9100TY03]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

DECISION ID	48089	Region 9
Jamul Creek		

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Nitrate/Nitrite (Nitrite + Nitrate as N).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Nitrate/Nitrite (Nitrite + Nitrate as N) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48089, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
Jamul Creek	

LOE ID: 73941

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 5/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48125	Region 9
Jamul Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Basin Plan Objective for Nitrogen, Nitrite.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Four samples exceeded the Basin Plan Objective for Nitrogen, Nitrite and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48125, Nitrogen, Nitrite	Region 9
Jamul Creek	

LOE ID:	73942
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Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**Line of Evidence (LOE) for Decision ID 48125, Nitrogen, Nitrite
Jamul Creek**

Region 9

LOE ID:	73943
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation:

Data was collected over the time period 7/2/2003-5/23/2005.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48127	Region 9
Jamul Creek		

Pollutant: Nitrogen, ammonia (Total Ammonia)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48127, Nitrogen, ammonia (Total Ammonia)	Region 9
Jamul Creek	

LOE ID: 73954

Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 7/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48092	Region 9
Jamul Creek		

Pollutant:	Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Parathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Water Quality Criteria for Parathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully
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supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48092, Parathion

Region 9

Jamul Creek

LOE ID:	77782
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Parathion, Ethyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The criterion continuous concentraion for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48096

Region 9

Jamul Creek

Pollutant:	Phorate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Phorate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Phorate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48096, Phorate

Region 9

Jamul Creek

LOE ID: 77783

Pollutant: Phorate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L).
Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura

Temporal Representation:	Creek @ Otay Lakes Rd.]
Environmental Conditions:	Data was collected on a single day 3/31/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48096, Phorate	Region 9
Jamul Creek	

LOE ID:	77784
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Åµg/L.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48097	Region 9
Jamul Creek		

Pollutant:	Phosmet
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Phosmet.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Phosmet and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48097, Phosmet

Region 9

Jamul Creek

LOE ID:	77785
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

Watersheds Report was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 48097, Phosmet

Region 9

Jamul Creek

LOE ID: 77786

Pollutant: Phosmet
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 µg/L.

Guideline Reference: [IRIS Database Calculations \(summary\)](#)

Spatial Representation: Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation: Data was collected on a single day 3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID

48100

Region 9

Jamul Creek

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the

Two samples exceed the California Toxics Rule Objective for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the California Toxics Rule Objective for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48100, Selenium

Region 9

Jamul Creek

LOE ID:	73944
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Jamul Creek

LOE ID:	73945
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48123

Region 9

Jamul Creek

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48123, Silver

Region 9

Jamul Creek

LOE ID:	73946
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48108

Region 9

Jamul Creek

Pollutant:

Zinc

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48108, Zinc

Region 9

Jamul Creek

LOE ID: 73949

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).

Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected once yearly from 2003 to 2006 and in 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48108, Zinc

Region 9

Jamul Creek

LOE ID:	73950
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48108, Zinc

Region 9

Jamul Creek

LOE ID:	73951
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd. - 9100TY03]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48108, Zinc

Region 9

Jamul Creek

LOE ID:	73952
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamul Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Jamul Creek was collected at 1 monitoring site [Dulzura Creek @ Otay Lakes Rd.]

Temporal Representation:

Data was collected once yearly from 2003 to 2006 and in 2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

43265

Region 9

Jamul Creek

Pollutant:

Alkalinity as CaCO₃ | Ammonia as Nitrogen | Manganese | Nickel | Orthophosphate | Total Kjeldahl Nitrogen (TKN) | Total Suspended Solids (TSS)

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:

Revision Status

Original

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 28 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 28 samples exceeded the Basin Plan objectives for inorganic chemicals and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43265, Multiple Pollutants

Region 9

Jamul Creek

LOE ID:

26390

Pollutant:

Alkalinity as CaCO₃ | Ammonia as Nitrogen | Manganese | Nickel | Orthophosphate | Total Kjeldahl Nitrogen (TKN) | Total Suspended Solids (TSS)

LOE Subgroup:

Pollutant-Water

Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Twenty-eight samples were collected at Jamul Creek station (910OTJAM4) during the months of January 2003, April 2003, and May 2003, for conventional inorganics analyses (SWAMP, 2007), none of the 28 samples exceeded evaluation concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Ammonia as N 0.025 mg/l, nitrite as N 1.mg/l, nitrogen total Kjeldahl (If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used), ortho phosphate as P total 0.05 mg/l, sulfate 250 mg/l.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Jamul Creek station (910OTJAM4); (Latitude 32.6369, Longitude -116.8842).
Temporal Representation:	Samples were collected during the months of January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	43574	Region 9
Jamul Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this indicator. 2 of 3 samples exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 2 of 3 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this

area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43574, Benthic Community Effects

Region 9

Jamul Creek

LOE ID:	26396
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three samples of IBI data were taken from November 2000 to May 2001 at two sampling sites. Of the total number of samples, two exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 910JCOLRx and 910JCGSxx on Jamul Creek.
Temporal Representation:	Sampling occurred during between November 2000 to May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID

44226

Region 9

Jamul Creek

Pollutant:	Metals
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. None of the 3 samples exceeded the CTR values for a number of metals and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44226, Metals

Region 9

Jamul Creek

LOE ID:	26388
Pollutant:	Metals
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three samples were collected at Jamul Creek station 4(910OTJAM4) during the months of January, April and May 2003 for the following constituents: aluminum dissolved, arsenic dissolved, cadmium dissolved, copper dissolved, selenium dissolved, silver dissolved, zinc dissolved (SWAMP, 2007), none of the 3 samples exceeded the metals evaluation concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

that produce detrimental physiological responses in human, plant, animal, or aquatic life
Water Quality Control for the San Diego Basin, 2007.

The Maximum Contaminant Level (MCL) for aluminum is 1.0 mg/l. From the California Toxic Rules, the dissolved chronic criterion for arsenic is 150 Åµg/l (ppb), cadmium 2.2 Åµg/l (ppb), copper is 9.0 Åµg/l (ppb), selenium 5.0 Åµg/l (ppb), zinc is 120 Åµg/l (ppb), chromium is 11 Åµg/l (ppb), lead 2.5 Åµg/l (ppb), and dissolved acute criterion for silver 3.4 Åµg/l (ppb).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)
[Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Samples were collected at Jamul Creek station 4(9100TJAM4); (Latitude 32.6369, Longitude -116.8842).

Temporal Representation:

Samples at Jamul Creek were collected during the months of January, April, and May 2003.

Environmental Conditions:

Samples were collected during wet-between storm events, wet-high base flow, and declining base flow conditions.

QAPP Information:

Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID	42757	Region 9
Jamul Creek		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 3 samples exceeded the CTR values for PAHs and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 42757, PAHs (Polycyclic Aromatic Hydrocarbons)**Region 9****Jamul Creek**

LOE ID:	26389
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three samples were collected at Jamul Creek station 4(910OTJAM4) during the months of January 2003, April 2003, and May 2003, for PAHs analyses. Analyses included: Acenaphthene, Anthracene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, and Fluorene. None of the 3 samples exceeded evaluation concentration.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Evaluation guidelines used came California Toxics Rule for Human Health Risk. Acenaphthene;1200 ug/l, Anthracene;9,600 ug/l, Benz(a)anthracene; 4.4 ug/l, Benzo(b)fluoranthene; 4.4 ug/l, Benzo(k)fluoranthene; 4.4 ug/l, Chrysene; 4.4 ug/l, Fluoranthene; 300 ug/l, and Fluorene; 1300 ug/l.
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA
Spatial Representation:	Samples were collected at Jamul Creek station 4(910OTJAM4); (Latitude 32.6369, Longitude -116.8842).
Temporal Representation:	Samples were collected during the months of January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

DECISION ID**43270****Region 9****Jamul Creek**

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2019

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the three samples exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 2 of 3 samples exhibited water toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43270, Toxicity

Region 9

Jamul Creek

LOE ID:	26150
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Two out of the 3 samples collected show significant toxicity levels (SL) to the green alga, <i>Selenastrum Capricornutum</i> , growth test. One of three samples collected show significant toxicity levels in the ten days survival test on <i>Hyalella azteca</i> , Survival and Growth test. <i>Ceriodaphnia dubia</i> , one test was conducted but did not show significant toxicity. The test results are from California's Surface Water Ambient Monitoring Program Report (2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal

[Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001](#)

Spatial Representation: Samples were collected at Jamul Creek station 4, 910OTJAM4;(Latitude 32.63693, Longitude -116.88422).

Temporal Representation: Samples were collected in January, April, and May 2003.

Environmental Conditions:

QAPP Information: Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 43270, Toxicity

Region 9

Jamul Creek

LOE ID: 26511

Pollutant: Sediment Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: Ambient toxicity testing (chronic)

Data Used to Assess Water Quality: Two sediment samples were collected and none showed significant toxicity levels (SL) in the Hyalella azteca, Survival and Growth test. The test results are from California's Surface Water Ambient Monitoring Program Report (2007).

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001](#)

Spatial Representation: Samples were collected at Jamul Creek station 4, 910OTJAM4;(Latitude 32.63693, Longitude -116.88422).

Temporal Representation: Samples were collected in January, April, and May 2003.

Environmental Conditions:

QAPP Information: Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Keys Creek](#)
Water Body ID: CAR9031200020081210153438
Water Body Type: River & Stream

DECISION ID	48139	Region 9
Keys Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the California Toxics Rule Objective for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48139, Arsenic	Region 9
Keys Creek	

LOE ID: 73964
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 1 monitoring site [Keys Creek (orange grove) - 903_SMC01909]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	44312	Region 9
Keys Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44312, Benthic Community Effects

Region 9

Keys Creek

LOE ID: 73965

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: The IBI score for this water body was below 40 which indicates that this water body may be considered to have impaired conditions.
Data Reference: [RWB9 Status Sampling 2007 and 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at the following station: 903SLKYS3 (Keys Creek 3).
Temporal Representation: Surveys done May 7, 2008.
Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44312, Benthic Community Effects

Region 9

Keys Creek

LOE ID: 79484

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality:	A total of five samples were taken between three stations in Keys Creek. One of the five samples was below the 0.79 threshold, and was therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at 903_SMC01909, 903REF-KC, and 903SLKYS3
Temporal Representation:	The samples were collected from 2001 to 2009
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project, the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Quality Assurance Project Plan for Southern California Regional Watershed Monitoring Program Bioassessment, Version 1.0, and Freshwater Bioassessment from Weston Solutions.

Line of Evidence (LOE) for Decision ID 44312, Benthic Community Effects

Region 9

Keys Creek

LOE ID:	72801
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys

Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 37.2. tr11e SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at 903_SMC01909, Keys Creek (orange grove) .
Temporal Representation:	The sample was collected in June 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for Southern California Regional Watershed Monitoring Program Bioassessment, Version 1.0, and Freshwater Bioassessment from Weston Solutions.

Line of Evidence (LOE) for Decision ID 44312, Benthic Community Effects

Region 9

Keys Creek

LOE ID:	26210
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of the four samples collected at Keys Creek station 3(903SLKYS3) from May 2004 to April 2005 showed excessive nitrogen concentration (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional

Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Water samples were collected from Keys Creek station 3(903SLKYS3); (Latitude 33.2894, Longitude -117.0715).

Temporal Representation:

Samples were collected in May 2004, September 2004, March 2005 and April 2005.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 44312, Benthic Community Effects

Region 9

Keys Creek

LOE ID: 26209

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Two of the three samples collected at Keys Creek station 3(903SLKYS3) from May 2004 to April 2005 showed excessive selenium concentration (SWAMP, 2007).

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L.
Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Water samples were collected from Keys Creek station 3(903SLKYS3); (Latitude 33.2894, Longitude -117.0715).

Temporal Representation:

Samples were collected in May 2004, September 2004, March 2005 and April 2005.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

Line of Evidence (LOE) for Decision ID 44312, Benthic Community Effects

Region 9

Keys Creek

LOE ID: 81139

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two of the three samples collected had IBI scores below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The samples were collected at station REF-KC, Keys Creek.
Temporal Representation:	The samples were collected in October 2001 and May and October 2002.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	48141	Region 9
Keys Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Bifenthrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Water Quality Criteria for Bifenthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48141, Bifenthrin
Keys Creek**

Region 9

LOE ID:	78054
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 1 monitoring site [Keys Creek (orange grove) - 903_SMC01909]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Twelve samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Twelve samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48142, Cadmium Keys Creek

Region 9

LOE ID:	73967
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Keys Creek was collected at 1 monitoring site [Keys Creek (orange grove) - 903_SMC01909]

Temporal Representation: Data was collected on a single day 6/8/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 48142, Cadmium
Keys Creek

Region 9

LOE ID: 73966

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 11
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Keys Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Keys Creek was collected at 2 monitoring site [Keys Creek @ Lilac Road] and [Keys Creek @ Dulin Road]

Temporal Representation: Data was collected May 2003 - June 2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 48611
Keys Creek

Region 9

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48611, Chlorpyrifos Keys Creek

Region 9

LOE ID:	73968
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring sites [Keys Creek @ Lilac Road, Keys Creek at Dulin Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 48607 Region 9	
Keys Creek	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Copper Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Eleven samples exceed the California Toxics Rule Objective for Copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Eleven samples exceeded the California Toxics Rule Objective for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48607, Copper Region 9	
Keys Creek	
LOE ID:	73969
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Keys Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring site [Keys Creek @ Lilac Road] and [Keys Creek @ Dulin Road]
Temporal Representation:	Data was collected May 2003 - June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48617	Region 9
Keys Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Cypermethrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of Zero samples exceeded the Water Quality Criteria for Cypermethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48617, Cypermethrin
Keys Creek**

Region 9

LOE ID:	78055
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 1 monitoring site [Keys Creek (orange grove) - 903_SMC01909]
Temporal Representation:	Data was collected on a single day 6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**DECISION ID
Keys Creek**

48627

Region 9

Pollutant: Diazinon

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48627, Diazinon
Keys Creek

Region 9

LOE ID: 73970

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring sites [Keys Creek @ Lilac Road, Keys Creek at Dulin Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48638	Region 9
Keys Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Eleven samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Eleven samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48638, Lead	Region 9
Keys Creek	

LOE ID:	73973
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Keys Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring site [Keys Creek @ Lilac Road] and [Keys Creek @ Dulin Road]
Temporal Representation:	Data was collected May 2003 - June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48641	Region 9
Keys Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a 3.1 line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Seven samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully

supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48641, Malathion

Region 9

Keys Creek

LOE ID:	73974
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring sites [Keys Creek @ Lilac Road, Keys Creek at Dulin Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48644

Region 9

Keys Creek

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Zero of One samples exhibited water toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is INSUFFICIENT justification FOR placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the One samples exceed the Basin Plan Objective for Toxicity and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48644, Toxicity
Keys Creek**

Region 9

LOE ID: 73976

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of *Ceriodaphnia dubia*.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the

control.

Guideline Reference:

Spatial Representation: The samples were collected from site 903_SMC01909, Keys Creek (orange grove).

Temporal Representation: The samples were collected in June 2008.

Environmental Conditions:

QAPP Information: This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

DECISION ID	48643	Region 9
Keys Creek		

Pollutant: Zinc

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Eleven samples exceed the California Toxics Rule Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Eleven samples exceeded the Evaluation Guideline for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48643, Zinc	Region 9
Keys Creek	

LOE ID: 73977

Pollutant: Zinc

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Keys Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring site [Keys Creek @ Lilac Road] and [Keys Creek @ Dulin Road]
Temporal Representation:	Data was collected May 2003 - June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48632	Region 9
Keys Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Eleven of the Eleven samples exceed the Single Sample Maximum Objective for Enterococcus, Six of the Eleven samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Three out of Eleven samples exceeded the Single Sample Maximum Guideline for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the Eleven samples exceed the Single Sample Maximum Objective for Enterococcus, Six

of the Eleven samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Three out of Eleven samples exceeded the Single Sample Maximum Guideline for Total Coliform, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48632, Indicator Bacteria

Region 9

Keys Creek

LOE ID:	73971
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring sites [Keys Creek at Dulin Road, Keys Creek @ Lilac Road]
Temporal Representation:	Data was collected over the time period 5/15/2003-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48632, Indicator Bacteria

Region 9

Keys Creek

LOE ID:	73972
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Keys Creek was collected at 2 monitoring sites [Keys Creek at Dulin Road, Keys Creek @ Lilac Road]
Temporal Representation:	Data was collected over the time period 5/15/2003-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48632, Indicator Bacteria Keys Creek

Region 9

LOE ID:	73975
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Keys Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November

Spatial Representation: Data for this line of evidence for Keys Creek was collected at 2 monitoring sites [Keys Creek at Dulin Road, Keys Creek @ Lilac Road]

Temporal Representation: Data was collected over the time period 5/15/2003-6/8/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	43330	Region 9
Keys Creek		

Pollutant: Nitrogen

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised

Sources: Source Unknown

Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This decision is being changed based on incorrect application of the listing policy. Nitrogen is a toxicant and should be assessed using table 3.1.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective for nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the Basin Plan objective for nitrogen.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43330, Nitrogen	Region 9
Keys Creek	

LOE ID: 26210

Pollutant: Nitrogen

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Not Recorded

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of the four samples collected at Keys Creek station 3(903SLKYS3) from May 2004 to April 2005 showed excessive nitrogen concentration (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected from Keys Creek station 3(903SLKYS3); (Latitude 33.2894, Longitude -117.0715).
Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005 and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	43933	Region 9
Keys Creek		

Pollutant:	Phosphorus
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples exceeded the Basin Plan objective for phosphorus and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 43933, Phosphorus
Keys Creek**

Region 9

LOE ID:	26208
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of 4 samples collected at Keys Creek station 3(903SLKYS3) from May 2004 to April 2005 showed excessive phosphorus concentration (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	As described in San Diego Basin Plan; inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected from Keys Creek station 3(903SLKYS3); (Latitude 33.2894, Longitude -117.0715).
Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 43217
Keys Creek

Region 9

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the three samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of three samples exceed the CTR value for Se and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43217, Selenium Keys Creek

Region 9

LOE ID:	26209
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of the three samples collected at Keys Creek station 3(903SLKYS3) from May 2004 to April 2005 showed excessive selenium concentration (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L.
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for

[the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA](#)

Evaluation Guideline:
Guideline Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Water samples were collected from Keys Creek station 3(903SLKYS3); (Latitude 33.2894, Longitude -117.0715).

Temporal Representation:

Samples were collected in May 2004, September 2004, March 2005 and April 2005.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey. CA](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Los Coches Creek](#)
Water Body ID: CAR9071400020081210155144
Water Body Type: River & Stream

DECISION ID	47444	Region 9
Los Coches Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence are necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. 0 of the13 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of thirteen samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47444, Cadmium	Region 9
Los Coches Creek	

LOE ID: 74202
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 13

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Los Coches Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]
Temporal Representation:	Data was collected from May 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47445	Region 9
Los Coches Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47445, Chlorpyrifos
Los Coches Creek**

Region 9

LOE ID:	74203
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Coches Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ Los Coches Road and Ha Hana Road, Los Coches Creek @ I-8 Business Route]
Temporal Representation:	Data was collected over the time period 8/5/2004-6/24/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 47455
Los Coches Creek**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence are necessary to assess listing status. One lines of evidence is available in the administrative record to assess this pollutant. 0 of the13 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of thirteen samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47455, Copper
Los Coches Creek**

Region 9

LOE ID:	74204
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Los Coches Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]

Temporal Representation:	Data was collected from May 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47464	Region 9
Los Coches Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence are necessary to assess listing status. One lines of evidence is available in the administrative record to assess this pollutant. 0 of the13 samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of thirteen samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47464, Lead	Region 9
Los Coches Creek	

LOE ID:	74215
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Los Coches Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]
Temporal Representation:	Data was collected from May 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47468	Region 9
Los Coches Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence are necessary to assess listing status. One lines of evidence is available in the administrative record to assess this pollutant. 0 of the 9 samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of nine samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy,
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47468, Malathion	Region 9
Los Coches Creek	

LOE ID:	74216
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Coches Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]
Temporal Representation:	Data was collected over the time period 9/23/2005-6/24/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47465	Region 9
Los Coches Creek		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence are necessary to assess listing status. One lines of evidence is available in the administrative record to assess this pollutant. 0 of the13 samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of thirteen samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 	

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47465, Zinc

Region 9

Los Coches Creek

LOE ID:	74218
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Los Coches Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]
Temporal Representation:	Data was collected from May 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47461

Region 9

Los Coches Creek

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. For Enterococcus, 12 of the 13 samples exceed the Water Quality Criteria of 61 /100 ml for water contact recreation in fresh water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. For enterococcus, 12 of 13 samples exceed the Water Quality Criteria of 61 /100 ml for water contact recreation in fresh water and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47461, Indicator Bacteria
Los Coches Creek

Region 9

LOE ID:	74206
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Coches Creek to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]
Temporal Representation:	Data was collected over the time period 5/21/2003-6/24/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47461, Indicator Bacteria	Region 9
Los Coches Creek	

LOE ID:	74205
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Coches Creek to determine beneficial use support and results are as follows: 12 of 13 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]
Temporal Representation:	Data was collected over the time period 5/21/2003-6/24/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47461, Indicator Bacteria	Region 9
Los Coches Creek	

LOE ID:	74217
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Los Coches Creek to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Los Coches Creek was collected at 2 monitoring sites [Los Coches Creek @ I-8 Business Route, Los Coches Creek @ Los Coches Road and Ha Hana Road]
Temporal Representation:	Data was collected over the time period 5/21/2003-6/24/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	43119	Region 9
Los Coches Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 samples exceeded the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 43119, Nitrogen
Los Coches Creek**

Region 9

LOE ID:	26189
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of four samples collected at Los Coches Creek station (907SDLCO2) from May 2004 to April 2005 showed excessive nitrogen concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007). A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Los Coches Creek station 2 (907SDLCO2).
Temporal Representation:	Samples were collected in May 2004, September 2004, February 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

**DECISION ID 44602
Los Coches Creek**

Region 9

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the 4 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 4 samples exceeded the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

**Line of Evidence (LOE) for Decision ID 44602, Phosphorus
Los Coches Creek**

Region 9

LOE ID:	26190
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of four samples collected at Los Coches Creek station 2(907SDLCO2) from May 2004 to April 2005 showed excessive phosphorus concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	As described in San Diego Basin Plan; inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).

From the Basin Plan: For inland surface waters-streams and other flowing waters, with all

Objective/Criterion Reference: beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Water samples were collected at Los Coches Creek station 2 (907SDLCO2).
Temporal Representation: Samples were collected in May 2004, September 2004; February 2005; and April 2005.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID	42782	Region 9
Los Coches Creek		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the 4 samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 4 samples exceed the CTR value for Se and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 42782, Selenium	Region 9
Los Coches Creek	

LOE ID:	26191
Pollutant:	Selenium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three of four samples collected at Los Coches Creek station 2 (907SDLCO2) from May 2004 to April 2005 showed excessive phosphorus concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Los Coches Creek station 2(907SDLCO2).
Temporal Representation:	Samples were collected in May 2004, September 2004; February 2005; and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Moosa Canyon Creek](#)
Water Body ID: CAR9031300020081210154123
Water Body Type: River & Stream

DECISION ID	48038	Region 9
Moosa Canyon Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48038, Arsenic Moosa Canyon Creek

LOE ID: 74387
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

Data Reference:	<p>criterion for Arsenic.</p> <p>Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 48116		Region 9
Moosa Canyon Creek		
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Benthic Community Effects Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant	
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. Of two stations sampled, one had evidence of degradation while one did not (n =2). 4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 48116, Benthic Community Effects		Region 9

Moosa Canyon Creek

LOE ID:	74388
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body is 13 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 903SLMSA2 (Moosa Creek 2).
Temporal Representation:	Surveys done May 9, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48116, Benthic Community Effects

Region 9

Moosa Canyon Creek

LOE ID:	26212
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at Moosa Creek station 2, (903SLMSA2) show excessive nitrogen concentrations. (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water Samples were collected at Moosa Creek station 2, 903SLMSA2; (Latitude 33.2862, Longitude -117.2092).
Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 48116, Benthic Community Effects

Region 9

Moosa Canyon Creek

LOE ID:	26213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	One of the three samples collected at Moosa Creek station 2(903SLMSA2) showed significant toxicity levels (SL) to the Green alga, <i>Selenastrum Capricornutum</i> , growth test method. None of the samples showed significant toxicity to <i>Ceriodaphnia dubia</i> .
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Samples were collected at Moosa Creek station 2 (903SLMSA2); (Latitude 33.2862, Longitude -117.2092).

Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

Line of Evidence (LOE) for Decision ID 48116, Benthic Community Effects

Region 9

Moosa Canyon Creek

LOE ID:	79485
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	A total of two samples were taken at two stations in Moosa Canyon Creek. One sample was below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at 903_SMC00457 and 903SLMSA2
Temporal Representation:	The sample were collected in June 2009 and May 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information RWB9 Status Sampling 2007 and 2008 Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional

Line of Evidence (LOE) for Decision ID 48116, Benthic Community Effects

Region 9

Moosa Canyon Creek

LOE ID:	26211
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at Moosa Creek station 2, (903SLMSA2) show excessive phosphorus concentrations. (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water Samples were collected at Moosa Creek station 2,903SLMSA2; (Latitude 33.2862, Longitude -117.2092).
Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 48116, Benthic Community Effects

Region 9

Moosa Canyon Creek

LOE ID:	74389
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 32.9. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Appendix 7-B Environmental Management Vol. 35, No. 4, pp. 493-504.
Spatial Representation:	The sample was collected at 903_SMC00457, Moosa Canyon Creek.
Temporal Representation:	The sample was collected in June 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	48041	Region 9
Moosa Canyon Creek		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the CRITERION for protection of the Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48041, Bifenthrin
Moosa Canyon Creek**

Region 9

LOE ID:	78066
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**DECISION ID 48043
Moosa Canyon Creek**

Region 9

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the CRITERION for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceeded the criterion which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48043, Cadmium
Moosa Canyon Creek**

Region 9

LOE ID:	74390
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 2 monitoring sites [Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]
Temporal Representation:	Data was collected June 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48043, Cadmium
Moosa Canyon Creek

Region 9

LOE ID: 74391

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]

Temporal Representation: Data was collected on a single day 6/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID 48111
Moosa Canyon Creek

Region 9

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the CRITERION for protection of the Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48111, Chlorpyrifos

Region 9

Moosa Canyon Creek

LOE ID:	74393
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 3 monitoring sites [

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Moosa Canyon Creek @ Sunday Drive, Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]

Data was collected over the time period 6/29/2006-6/8/2009.

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48051	Region 9
Moosa Canyon Creek		

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48051, Chromium	Region 9
Moosa Canyon Creek	

LOE ID: 74394

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48046	Region 9
Moosa Canyon Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceeded the criterion which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48046, Copper	Region 9
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Moosa Canyon Creek

LOE ID:	74395
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 2 monitoring sites [Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]
Temporal Representation:	Data was collected June 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48046, Copper**Region 9****Moosa Canyon Creek**

LOE ID:	74396
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48112	Region 9
Moosa Canyon Creek		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the CRITERION for protection of the Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48112, Cypermethrin	Region 9
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Moosa Canyon Creek

LOE ID:	78067
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48114	Region 9
Moosa Canyon Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the CRITERION for protection of the Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>
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303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 10 samples exceeded the CRITERIA for the aquatic life beneficial use which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48114, Diazinon
Moosa Canyon Creek**

Region 9

LOE ID:	74397
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 3 monitoring sites [Moosa Canyon Creek @ Sunday Drive, Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]
Temporal Representation:	Data was collected over the time period 6/29/2006-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48047	Region 9
Moosa Canyon Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the CRITERION for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceeded the criterion which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48047, Lead	Region 9
Moosa Canyon Creek	

LOE ID:	74401
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 48047, Lead
Moosa Canyon Creek**

Region 9

LOE ID:	74400
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 2 monitoring sites [Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]
Temporal Representation:	Data was collected June 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48115	Region 9
Moosa Canyon Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the CRITERION for protection of the Aquatic Life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 10 samples exceeded the CRITERIA for the aquatic life beneficial use which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48115, Malathion	Region 9
Moosa Canyon Creek	

LOE ID:	74402
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 3 monitoring sites [Moosa Canyon Creek @ Sunday Drive, Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]
Temporal Representation:	Data was collected over the time period 6/29/2006-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48048	Region 9
Moosa Canyon Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceeded the criterion which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48048, Nickel	Region 9
Moosa Canyon Creek	

LOE ID:	79049
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 2 monitoring sites [Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]
Temporal Representation:	Data was collected June 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48048, Nickel
Moosa Canyon Creek

Region 9

LOE ID:	74403
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	42906	Region 9
Moosa Canyon Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of four of the samples exceed the water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of four of the samples exceed the water quality objective for toxicity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42906, Toxicity	Region 9
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Moosa Canyon Creek

LOE ID:	74405
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold
Guideline Reference:	
Spatial Representation:	The samples were collected from site 903_SMC00457, Moosa Creek.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 42906, Toxicity

Region 9

Moosa Canyon Creek

LOE ID:	26213
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	One of the three samples collected at Moosa Creek station 2(903SLMSA2) showed significant toxicity levels (SL) to the Green alga, Selenastrum Capricornutum, growth test method. None of the samples showed significant toxicity to Ceriodaphnia dubia.

Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water Samples were collected at Moosa Creek station 2 (903SLMSA2); (Latitude 33.2862, Longitude -117.2092).
Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 48049		Region 9
Moosa Canyon Creek		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceeded the criterion which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 48049, Zinc		Region 9

Moosa Canyon Creek

LOE ID:	74407
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 1 monitoring site [Moosa Creek - 903_SMC00457]
Temporal Representation:	Data was collected on a single day 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48049, Zinc

Region 9

Moosa Canyon Creek

LOE ID:	74406
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Zinc.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 2 monitoring sites [Moosa Canyon Creek @ End of Betsworth Road, Moosa Canyon Creek at Old River Road]
Temporal Representation:	Data was collected June 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48050	Region 9
Moosa Canyon Creek		
Pollutant:	Indicator Bacteria	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2027	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. 15 of the 17 samples exceed the objective for enterococcus. Six of 17 samples exceed the objective for fecal coliform and three of 17 samples exceed the objective for total coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 15 of 17 samples and 6 of 17 samples exceed the objectives and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.	

Line of Evidence (LOE) for Decision ID 48050, Indicator Bacteria**Region 9****Moosa Canyon Creek**

LOE ID:	74404
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 3 monitoring sites [Moosa Canyon Creek at Old River Road, Moosa Canyon Creek @ Sunday Drive, Moosa Canyon Creek @ End of Betsworth Road]
Temporal Representation:	Data was collected over the time period 6/3/2003-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48050, Indicator Bacteria**Region 9****Moosa Canyon Creek**

LOE ID:	74398
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 15 of 17 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 3 monitoring sites [Moosa Canyon Creek at Old River Road, Moosa Canyon Creek @ Sunday Drive, Moosa Canyon Creek @ End of Betsworth Road]
Temporal Representation:	Data was collected over the time period 6/3/2003-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48050, Indicator Bacteria

Region 9

Moosa Canyon Creek

LOE ID:	74399
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon Creek to determine beneficial use support and results are as follows: 6 of 17 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon Creek was collected at 3 monitoring sites [Moosa Canyon Creek at Old River Road, Moosa Canyon Creek @ Sunday Drive, Moosa Canyon Creek @ End of Betsworth Road]
Temporal Representation:	Data was collected over the time period 6/3/2003-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	42371	Region 9
Moosa Canyon Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 42371, Nitrogen	Region 9
Moosa Canyon Creek	

LOE ID:	26212
Pollutant:	Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at Moosa Creek station 2, (903SLMSA2) show excessive nitrogen concentrations. (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).</p> <p>A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water Samples were collected at Moosa Creek station 2, 903SLMSA2; (Latitude 33.2862, Longitude -117.2092).
Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	44652	Region 9
Moosa Canyon Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the Basin Plan water quality objective for phosphorus as P.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the four samples exceed the Basin Plan water quality objective for phosphorus as P and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 44652, Phosphorus
Moosa Canyon Creek**

Region 9

LOE ID:	26211
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at Moosa Creek station 2, (903SLMSA2) show excessive phosphorus concentrations. (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	<p>Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.</p> <p>For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L. This appears to be the desired goal in order to prevent plant nuisance in streams and other flowing waters; not to be exceeded more than 10% of the time (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water Samples were collected at Moosa Creek station 2,903SLMSA2; (Latitude 33.2862, Longitude -117.2092).
Temporal Representation:	Samples were collected in May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Moro Canyon Creek](#)
Water Body ID: CAR9011100020081210154547
Water Body Type: River & Stream

DECISION ID	48261	Region 9
Moro Canyon Creek		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Two of the 151 samples exceed the single sample objective for enterococcus and five of the 137 samples exceed the geomean objective for enterococcus. Zero of 151 samples exceed the single sample objectives for fecal and total coliform. Zero of 131 samples exceed the geomean objectives for fecal and total coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 2 of 151 samples exceed the single sample objective and 5 of 137 samples exceed the geomean objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48261, Indicator Bacteria	Region 9
Moro Canyon Creek	

LOE ID: 74422

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	132
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 132 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Morro Creek (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48261, Indicator Bacteria

Region 9

Moro Canyon Creek

LOE ID:	74418
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the five geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the El Morro Creek site.
Temporal Representation:	Samples were collected approximately once a week from September 2008 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48261, Indicator Bacteria

Region 9

Moro Canyon Creek

LOE ID:	74420
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	132
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 132 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. Californis Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Morro Creek (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48261, Indicator Bacteria

Region 9

Moro Canyon Creek

LOE ID:	74419
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 151 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml.

Objective/Criterion Reference: Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan. [Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Morro Creek (surfzone upcoast and surfzone downcoast).
Temporal Representation: The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48261, Indicator Bacteria	Region 9
Moro Canyon Creek	

LOE ID: 74426

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 151
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 151 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Morro Creek (surfzone upcoast and surfzone downcoast).
Temporal Representation: The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48261, Indicator Bacteria	Region 9
Moro Canyon Creek	

LOE ID: 74427

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	132
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 132 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Morro Creek(surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48261, Indicator Bacteria
Moro Canyon Creek

Region 9

LOE ID:	74421
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 151 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected from Morro Creek (surfzone upcoast and surfzone downcoast).
Temporal Representation: The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

DECISION ID	48262	Region 9
Morro Canyon Creek		

Pollutant: Oxygen, Dissolved
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the [OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48262, Oxygen, Dissolved	Region 9
Morro Canyon Creek	

LOE ID: 74423

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 sample of Dissolved Oxygen concentrations had no exceedences.
Data Reference:	Data for bacteria in various waterbodies, Feb. 2005-May 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the El Morrow Creek - fresh water station.
Temporal Representation:	One sample was collected in May 2007.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	48263	Region 9
Moro Canyon Creek		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the [OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48263, pH		Region 9
Moro Canyon Creek		

LOE ID:	74424
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 sample of pH data had no exceedences.
Data Reference:	Data for bacteria in various waterbodies, Feb. 2005-May 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the El Morrow Creek station.
Temporal Representation:	One sample was collected on 5/5/2007.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	43125	Region 9
Moro Canyon Creek		

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Two of the four samples exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of four samples exceed the OBJECTIVE and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43125, Nitrogen

Region 9

Moro Canyon Creek

LOE ID:	26193
Pollutant:	Nitrogen
LOE Subgroup:	Subgroup Missing
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two of the four samples collected at Moro Canyon Creek 2 Station (901SJMCC2) (Latitude 33.5624, Longitude -117.8182) from October 2002 to May 2003 showed excessive nitrogen concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Moro Canyon Creek 2 Station (901SJMCC2). (Latitude 33.5624, Longitude -117.8182).
Temporal Representation:	Samples were collected in October 2002; January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43125, Nitrogen

Region 9

Moro Canyon Creek

LOE ID: 26197

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Moro Canyon Creek 2 Station (901SJMCC2) (Latitude 33.5624, Longitude -117.8182) from October 2002 to May 2003 for the Surface Water Ambient Monitoring Program. Selenastrum Capicornutum alga growth test: - All four samples were considered toxic; Ceriodaphnia dubia survival and reproduction test: One of the two samples was toxic; Hyalella azteca; None of the two samples was toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Moro Canyon Creek 2 Station (901SJMCC2). (Latitude 33.5624, Longitude -117.8182).
Temporal Representation:	Samples were collected in October 2002; January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	42334	Region 9
Moro Canyon Creek		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the Basin Plan water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the four samples exceed the Basin Plan water quality objective for phosphorus and this exceeds the allowable frequency listed table 3.1 of the Listing Policy.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 42334, Phosphorus

Region 9

Moro Canyon Creek

LOE ID:	26197
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Moro Canyon Creek 2 Station (901SJMCC2) (Latitude 33.5624, Longitude -117.8182) from October 2002 to May 2003 for the Surface Water Ambient Monitoring Program. Selenastrum Capicornutum alga growth test: - All four samples were considered toxic; Ceriodaphnia dubia survival and reproduction test: One of the two samples was toxic; Hyalella azteca; None of the two samples was toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Moro Canyon Creek 2 Station (901SJMCC2). (Latitude 33.5624, Longitude -117.8182).
Temporal Representation:	Samples were collected in October 2002; January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42334, Phosphorus

Region 9

Moro Canyon Creek

LOE ID: 26194

Pollutant: Phosphorus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
 Number of Exceedances: 4

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
 Data Used to Assess Water Quality: All four samples collected at Moro Canyon Creek 2 Station (901SJGCC2) (Latitude 33.5624, Longitude -117.8182) from October 2002 to May 2003 showed excessive phosphorus concentrations (SWAMP, 2007).

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.

Objective/Criterion Reference: Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters (RWQCB, 2007).
[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Water samples were collected at Moro Canyon Creek 2 Station (901SJGCC2). (Latitude 33.5624, Longitude -117.8182).

Temporal Representation: Samples were collected in October 2002; January 2003, April 2003, and May 2003.

Environmental Conditions:
 QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID	42852	Region 9
Moro Canyon Creek		

Pollutant: Selenium

Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)

Revision Status Original

Sources: Source Unknown

Expected TMDL Completion Date: 2021

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Regional Board Conclusion:
 This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the water quality objective for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceeded the water quality objective for Selenium and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

The Regional Board staff incorrectly assessed selenium as a conventional pollutant and applied table 3.2 of the listing Policy. Selenium is a toxicant and should be assessed using Table 3.1 . State Water Board staff has corrected this error and revised the recommendation to List for selenium. The revised recommendation is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the water quality objective for selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceeded the water quality objective for selenium and this exceeds the allowable frequency under Section 3.1 of the Listing Policy.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42852, Selenium

Region 9

Moro Canyon Creek

LOE ID:	26195
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All four samples collected at Moro Canyon Creek 2 Station (901SJMCC2) (Latitude 33.5624, Longitude -117.8182) showed excessive selenium concentrations according to results from the Surface Water Ambient Monitoring program. Samples were collected from October 2002 through May 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/l. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Moro Canyon Creek 2 Station (901SJMCC2). (Latitude 33.5624, Longitude -117.8182).
Temporal Representation:	Samples were collected in October 2002; January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42852, Selenium

Region 9

Moro Canyon Creek

LOE ID:	26197
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Moro Canyon Creek 2 Station (901SJMCC2) (Latitude 33.5624, Longitude -117.8182) from October 2002 to May 2003 for the Surface Water Ambient Monitoring Program. Selenastrum Capicornutum alga growth test: - All four samples were considered toxic; Ceriodaphnia dubia survival and reproduction test: One of the two samples was toxic; Hyalella azteca; None of the two samples was toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Moro Canyon Creek 2 Station (901SJMCC2). (Latitude

Temporal Representation: 33.5624, Longitude -117.8182).
Environmental Conditions: Samples were collected in October 2002; January 2003, April 2003, and May 2003.
QAPP Information: Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

DECISION ID	43527	Region 9
Moro Canyon Creek		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the four samples exceed the Basin Plan water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of four samples exceed the Basin Plan water quality objective for toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 43527, Toxicity	Region 9
Moro Canyon Creek	

LOE ID:	26197
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4

Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Four samples were collected at Moro Canyon Creek 2 Station (901SJMCC2) (Latitude 33.5624, Longitude -117.8182) from October 2002 to May 2003 for the Surface Water Ambient Monitoring Program. Selenastrum Capicornutum alga growth test: - All four samples were considered toxic; Ceriodaphnia dubia survival and reproduction test: One of the two samples was toxic; Hyalella azteca; None of the two samples was toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at Moro Canyon Creek 2 Station (901SJMCC2). (Latitude 33.5624, Longitude -117.8182).
Temporal Representation:	Samples were collected in October 2002; January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Tecate Creek](#)
Water Body ID: CAR9112300020081210154839
Water Body Type: River & Stream

DECISION ID	43237	Region 9
Tecate Creek		

Pollutant: Nitrogen
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Four of four samples exceed the water quality objectives for biostimulatory substances.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four samples exceed the water quality objectives for biostimulatory substances and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43237, Nitrogen	Region 9
Tecate Creek	

LOE ID: 26215
Pollutant: Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of four samples collected at Tecate Creek station (911TTET02) showed excessive nitrogen concentrations. (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	As described in San Diego Basin Plan; inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used (RWQCB, 2007).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Tecate Creek station (911TTET02).
Temporal Representation:	Samples were collected on June 2005; September 2005; January 2006; and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

DECISION ID	42788	Region 9
Tecate Creek		
Pollutant:	Phosphorus	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2023	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, one line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of four of the samples exceed the Basin Plan water quality objective for Phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the four samples exceeded the Basin Plan objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 42788, Phosphorus
Tecate Creek**

Region 9

LOE ID:	26214
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Four of four samples collected at Tecate Creek station (911TTET02) showed excessive phosphorus concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	As described in San Diego Basin Plan; inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	From the Basin Plan: For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L (RWQCB, 2007).
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at Tecate Creek station (911TTET02).
Temporal Representation:	Samples were collected on June 2005; September 2005; January 2006; and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

**DECISION ID 43218
Tecate Creek**

Region 9

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

One line of evidence is available in the administrative record to assess this pollutant. Four of f This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. our of the samples exceed the California Toxics Rule water quality objective for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of four of the samples exceed the California Toxics Rule water quality objective for Selenium and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43218, Selenium

Region 9

Tecate Creek

LOE ID: 26216

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 4

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Four of four samples collected at Tecate Creek station (911TTET02) showed excessive selenium concentrations (SWAMP, 2007).
Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA](#)

Evaluation Guideline: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Guideline Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation:

Samples were collected at Tecate Creek station (911TTET02).

Temporal Representation:

Samples were collected on June 2005; September 2005; January 2006; and April 2006.

Environmental Conditions:

QAPP Information:

Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Black Canyon](#)
Water Body ID: CAR9055200020081223083535
Water Body Type: River & Stream

DECISION ID	43002	Region 9
Black Canyon		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43002, Benthic Community Effects

Black Canyon

Region 9

LOE ID: 26832

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Three samples of IBI data were taken from May 2001 to June 2005 at one sampling site. Of the total number of samples, two samples exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 905BMCCGx on Black Canyon Creek.
Temporal Representation:	Sampling occurred during one event on May 2001, May 2004, and June 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring and Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Campo Creek](#)
Water Body ID: CAR9118200020081222142645
Water Body Type: River & Stream

DECISION ID	48195	Region 9
Campo Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48195, Arsenic	Region 9
Campo Creek	

LOE ID: 73095
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID 48226		Region 9
Campo Creek		
Pollutant:	Azinphos-methyl (Guthion)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the	

Line of Evidence (LOE) for Decision ID 48226, Azinphos-methyl (Guthion)**Region 9****Campo Creek**

LOE ID:	77989
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for Azinphos Methyl (Guthion) for the protection of freshwater aquatic life is a maximum of 0.01 ug/l.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID**42270****Region 9****Campo Creek**

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution
Regional Board Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index at the upstream station. The downstream station does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, additional data and information are available indicating that standards are not being met: The upstream station is located adjacent to grazing activities, including in the stream. As there is no associated pollutant this water should remain in Category 4c.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 42270, Benthic Community Effects
Campo Creek**

Region 9

LOE ID:	26243
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight samples of IBI data were taken from May 2003 to May 2007 at two sampling sites. Seven of the eight samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13

Spatial Representation:	Samples were collected at two sites: CC-H94 and CC-C on Campo Creek.
Temporal Representation:	Sampling occurred in May 2003, May and October from 2004 to 2006, and in May 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 42270, Benthic Community Effects	Region 9
Campo Creek	

LOE ID:	79692
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples were collected at two stations in lower Campo Creek. The CSCI scores are above the 0.79 threshold, and therefore the site is not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following station: 911TCAM01 (Campo Creek 1) and 911CC-H94.
Temporal Representation:	Surveys done in 2003 and 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project and the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 42270, Benthic Community Effects	Region 9
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Campo Creek

LOE ID:	79691
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples were taken from one station in Campo Creek. Three samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at 911CC-C.
Temporal Representation:	The samples were collected from 2003 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 42270, Benthic Community Effects

Region 9

Campo Creek

LOE ID:	73097
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	8
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eight of the nine samples collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at two stations on Campo Creek. The stations are CC-C or TJR-TWAS-1 and CC-H94.
Temporal Representation:	The samples were collected in May and October from 2003 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 42270, Benthic Community Effects
Campo Creek

Region 9

LOE ID:	73096
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 32 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 911TCAM01 (Campo Creek 1).
Temporal Representation:	Survey done May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

DECISION ID 48197		Region 9
Campo Creek		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 9 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 9 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 48197, Cadmium		Region 9
Campo Creek		
LOE ID:	73099	
Pollutant:	Cadmium	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94 - 911TIJ04]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48197, Cadmium
Campo Creek

Region 9

LOE ID:	73100
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]

Temporal Representation:

Data was collected over the time period 2/6/2009-3/31/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 48197, Cadmium

Region 9

Campo Creek

LOE ID: 73098

Pollutant: Cadmium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Campo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]

Temporal Representation:

Data was collected from 5/31/2005 through 6/2/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

48207

Region 9

Campo Creek

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48207, Chlorpyrifos Campo Creek

Region 9

LOE ID:	77990
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L

Guideline Reference:	(Siepmann and Finlayson 2000). Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48207, Chlorpyrifos

Region 9

Campo Creek

LOE ID:	73101
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/31/2005-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48233

Region 9

Campo Creek

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48233, Chromium

Region 9

Campo Creek

LOE ID: 73102

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each

Objective/Criterion Reference:	sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94 - 911TIJ04]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48206	Region 9
Campo Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48206, Copper	Region 9
Campo Creek	

LOE ID:	73103
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Campo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected from 5/31/2005 through 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48206, Copper

Region 9

Campo Creek

LOE ID:	73104
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to

protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94 - 911TIJ04]

Temporal Representation:

Data was collected over the time period 2/6/2009-3/31/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID	48232	Region 9
Campo Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48232, Diazinon	Region 9
Campo Creek	

LOE ID: 77991

Pollutant: Diazinon

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48232, Diazinon
Campo Creek

Region 9

LOE ID:	73105
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality

Objective/Criterion Reference:	Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/31/2005-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48234	Region 9
Campo Creek		

Pollutant:	Dimethoate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48234, Dimethoate	Region 9
Campo Creek	

LOE ID:	77717
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48235	Region 9
Campo Creek		

Pollutant:	Disulfoton
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48235, Disulfoton
Campo Creek**

Region 9

LOE ID:	77718
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for disulfoton is 0.05 µg/L (US EPA 1973).
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**DECISION ID 48237
Campo Creek**

Region 9

Pollutant:	Ethoprop
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48237, Ethoprop Campo Creek

Region 9

LOE ID:	77719
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID	48202	Region 9
Campo Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48202, Lead	Region 9
Campo Creek	

LOE ID:	73112
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.

Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94 - 911TIJ04]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48202, Lead

Region 9

Campo Creek

LOE ID:	73111
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Campo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected from 5/31/2005 through 6/2/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48203	Region 9
Campo Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48203, Malathion		Region 9
Campo Creek		

LOE ID:	77992
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Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
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Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for

Data Reference:	Malathion. Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48203, Malathion Campo Creek

Region 9

LOE ID:	73113
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/31/2005-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	48236	Region 9
Campo Creek		

Pollutant: Methidathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48236, Methidathion	Region 9
Campo Creek	

LOE ID: 77720

Pollutant: Methidathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48238	Region 9
Campo Creek		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48238, Methyl Parathion	Region 9
Campo Creek	

LOE ID:	77721
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48241	Region 9
Campo Creek		
Pollutant:	Nickel	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48241, Nickel
Campo Creek**

Region 9

LOE ID:	73114
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94 - 911TIJ04]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

48943

Region 9

Campo Creek

Pollutant:
Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Parathion
Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48943, Parathion

Region 9

Campo Creek

LOE ID: 77722

Pollutant: Parathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Parathion, Ethyl.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The criterion continuous concentraion for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48239	Region 9
Campo Creek		

Pollutant:	Phorate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48239, Phorate	Region 9
Campo Creek	

LOE ID:	77723
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	48240	Region 9
Campo Creek		

Pollutant:	Phosmet
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48240, Phosmet
Campo Creek**

Region 9

LOE ID:	77724
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**DECISION ID 48242
Campo Creek**

Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48242, Selenium
Campo Creek**

Region 9

LOE ID:	73115
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

DECISION ID	48204	Region 9
Campo Creek		

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48204, Zinc	Region 9
Campo Creek	

LOE ID: 73119

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Campo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94 - 911TIJ04]
Temporal Representation:	Data was collected over the time period 2/6/2009-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48204, Zinc

Region 9

Campo Creek

LOE ID:	73118
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Campo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected from 5/31/2005 through 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

DECISION ID	48243	Region 9
Campo Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. With the latest data, six of seven single samples exceed the water quality objective for enterococcus of 61/100 ml for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. With the latest data, six of seven single samples exceed the water quality objective for enterococcus of 61/100 ml for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 48243, Indicator Bacteria	Region 9
Campo Creek	

LOE ID:	73106
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for

Data Reference:	Enterococci. Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on 2/6/2009 and 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48243, Indicator Bacteria

Region 9

Campo Creek

LOE ID:	73116
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on 2/6/2009 and 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48243, Indicator Bacteria**Region 9****Campo Creek**

LOE ID:	73117
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/31/2005-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48243, Indicator Bacteria**Region 9****Campo Creek**

LOE ID:	73110
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine

	beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/31/2005-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48243, Indicator Bacteria

Region 9

Campo Creek

LOE ID:	73109
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on 2/6/2009 and 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48243, Indicator Bacteria**Region 9****Campo Creek**

LOE ID:	73108
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]
Temporal Representation:	Data was collected on a single day 2/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 48243, Indicator Bacteria**Region 9****Campo Creek**

LOE ID:	73107
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Campo Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Campo Creek was collected at 1 monitoring site [Campo Creek @ Highway 94]

Temporal Representation:

Data was collected over the time period 5/31/2005-6/3/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Chicarita Creek](#)
Water Body ID: CAR9062000020081223083844
Water Body Type: River & Stream

DECISION ID	42283	Region 9
Chicarita Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 6 of 6 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 6 of 6 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy, however as required under section 3.9 of the Listing Policy, pollutant(s) could not be directly associated with the Benthic Community Effects.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42283, Benthic Community Effects	Region 9
Chicarita Creek	

LOE ID: 26377
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six samples of IBI data were taken from May 2000 to 2007 at two sampling sites. Of the total number of samples, all six samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 906CCECRx and 906LPCRC2 on Chicarita Creek.
Temporal Representation:	Sampling occurred during one event annually over a four year period from May 2004 to 2007 and two events in May and November of the year 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Conejos Creek](#)
Water Body ID: CAR9073100020081223084048
Water Body Type: River & Stream

DECISION ID	44163	Region 9
Conejos Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 4 of 4 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 4 of 4 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44163, Benthic Community Effects	Region 9
Conejos Creek	

LOE ID: 26379
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were collected between May 2001 to 2007 at one sampling site. All four samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 907CONECR on Conejos Creek.
Temporal Representation:	Sampling occurred during four events from May 2001 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring and Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [French Creek \(San Diego County\)](#)
Water Body ID: CAR9032200020081223080715
Water Body Type: River & Stream

DECISION ID 43317 **Region 9**
French Creek (San Diego County)

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 1 of 4 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 1 of 4 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43317, Benthic Community Effects **Region 9**
French Creek (San Diego County)

LOE ID: 26385
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Aquatic Life Use:	Preservation of Rare & Endangered Species
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from May 2001 to 2007 at two sampling sites. One of the four samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 903FCPSPx and 903SLFPCx on French Creek.
Temporal Representation:	Sampling occurred during four events from May 2001 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Fry Creek](#)
Water Body ID: CAR9033100020081223081859
Water Body Type: River & Stream

DECISION ID	44229	Region 9
Fry Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community does not exhibit degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 44229, Benthic Community Effects	Region 9
Fry Creek	

LOE ID: 73754
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 53 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	Samples were collected at the following station: 903SLFRCx (Fry Creek (FRC)).
Temporal Representation:	Survey done May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44229, Benthic Community Effects

Region 9

Fry Creek

LOE ID:	79482
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by

comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference: [The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation: Samples were collected at the following station: 903SLFRCx (Fry Creek (FRC)).
Temporal Representation: Survey done May 7, 2008.

Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.

QAPP Information Reference(s): [RWB9 Status Sampling 2007 and 2008](#)

Line of Evidence (LOE) for Decision ID 44229, Benthic Community Effects Fry Creek

Region 9

LOE ID: 26387

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Two samples of IBI data were taken on May 2001 and June of 2005 at one sampling site. None of the samples exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at one site: 903FCFCCx on Fry Creek.
Temporal Representation: Sampling occurred during two events on May 2001 and June of 2005.

Environmental Conditions:
QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality

QAPP Information Reference(s):

Assurance Project Plan.

[State of California, California Monitoring and Assessment Program: "CMAP".](#)

[Quality Assurance Project Plan for the California Stream Bioassessment Procedure](#)

[The San Diego Stream Team Quality Assurance Project Plan](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Gopher Creek](#)
Water Body ID: CAR9031200020081223084435
Water Body Type: River & Stream

DECISION ID	47402	Region 9
Gopher Creek		

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the Evaluation Guideline for Chlorpyrifos. Five samples were collected and all were non detects, but none could be used in this assessment as per the management guidance document on quantitation limits (imperfect scenario #1).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47402, Chlorpyrifos	Region 9
Gopher Creek	

LOE ID: 73776
Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Gopher Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]
Temporal Representation:	Data was collected over the time period 5/15/2006-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47404	Region 9
Gopher Creek		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the California Toxics Rule Objective for copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial 	

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47404, Copper

Region 9

Gopher Creek

LOE ID: 73777

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Gopher Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]

Temporal Representation: Data was collected 6/3/2003 - 5/28/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 47405

Region 9

Gopher Creek

Pollutant: Diazinon
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the Evaluation Guideline for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the Evaluation Guideline for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47405, Diazinon
Gopher Creek**

Region 9

LOE ID: 73778

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Gopher Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]

Temporal Representation: Data was collected over the time period 5/15/2006-5/28/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47409	Region 9
Gopher Creek		

Pollutant: Malathion

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47409, Malathion	Region 9
Gopher Creek	

LOE ID: 73771

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Gopher Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]
Temporal Representation:	Data was collected over the time period 5/15/2006-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47411	Region 9
Gopher Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the California Toxics Rule Objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47411, Zinc

Region 9

Gopher Creek

LOE ID:	73773
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Gopher Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]
Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47406

Region 9

Gopher Creek

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2025

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Ten of the Ten samples exceed the Single Sample Maximum Objective for Enterococcus, Seven out of Ten samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Four out of Ten samples exceeded the Single Sample Maximum Guideline for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the Ten samples exceed the Single Sample Maximum Objective for Enterococcus, Seven out of Ten samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Four out of Ten samples exceeded the Single Sample Maximum Guideline for Total Coliform, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47406, Indicator Bacteria		Region 9
Gopher Creek		
LOE ID:	73779	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	10	
Number of Exceedances:	10	
Data and Information Type:	PATHOGEN MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Gopher Creek to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Enterococci.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:		
Guideline Reference:		

Spatial Representation:	Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47406, Indicator Bacteria	Region 9
Gopher Creek	

LOE ID:	73772
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Gopher Creek to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxicsubstances in concentrations which are toxic to,or which produce detrimental physiologicalresponses in human, plant, animal, or indigenousaquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47406, Indicator Bacteria	Region 9
Gopher Creek	

LOE ID:	73780
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Gopher Creek to determine beneficial use support and results are as follows: 7 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	42652	Region 9
Gopher Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this indicator. 2 of 2 samples exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 2 of 2 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing

Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 42652, Benthic Community Effects

Region 9

Gopher Creek

LOE ID:	26833
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken from June 2003 to June 2006 at one sampling site. Of the total number of samples, two samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 903SLLGC2 on Gopher Creek.
Temporal Representation:	Sampling occurred during one event on June 2003 and one event on June 2006.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

DECISION ID

47401

Region 9

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the Basin Plan Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47401, Cadmium

Region 9

Gopher Creek

LOE ID: 73775

Pollutant: Cadmium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Gopher Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies

Objective/Criterion Reference: based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]

Temporal Representation: Data was collected 6/3/2003 - 5/28/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47408	Region 9
Gopher Creek		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Lead Do Not List on 303(d) list (TMDL required list) New Decision Original Pollutant
Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the California Toxics Rule for Lead. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the California Toxics Rule Objective for lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47408, Lead	Region 9
Gopher Creek	

LOE ID: 73770

Pollutant: Lead

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Gopher Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gopher Creek was collected at 1 monitoring site [Little Gopher Canyon Creek at Old River Road]
Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Iron Springs Creek](#)
Water Body ID: CAR9033100020081223082602
Water Body Type: River & Stream

DECISION ID	44230	Region 9
Iron Springs Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 44230, Benthic Community Effects	Region 9
Iron Springs Creek	

LOE ID: 26392
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken on June of 2004 at one sampling site. The sample did not exceed the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 903IRS2xx on Iron Springs Creek.
Temporal Representation:	Sampling occurred during one event on June of 2004.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44230, Benthic Community Effects Iron Springs Creek

Region 9

LOE ID:	79480
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following station: 903SLIRS2 (Irons Springs 2).
Temporal Representation:	Surveys done June 6, 2007.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008

Line of Evidence (LOE) for Decision ID 44230, Benthic Community Effects Iron Springs Creek

Region 9

LOE ID:	73904
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the 2 IBI scores for this water body were below 40. A score under 40 indicates that this water body may be considered to have impaired conditions. There were 3 replicates using the same collection method, those three IBI scores were averaged and resulted in an IBI score of 35.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13

Spatial Representation:	Samples were collected at the following station: 903SLIRS2 (Irons Springs 2).
Temporal Representation:	Surveys done June 6, 2007.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Lawson Creek](#)
Water Body ID: CAR9092100020081222142247
Water Body Type: River & Stream

DECISION ID	42812	Region 9
Lawson Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 42812, Benthic Community Effects	Region 9
Lawson Creek	

LOE ID: 26414
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken on November 2005 at one sampling site. Of the total number of samples, one of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 909LSCLVR on Lawson Creek.
Temporal Representation:	Sampling occurred in November 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 42812, Benthic Community Effects

Region 9

Lawson Creek

LOE ID:	74131
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body is 16 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 909SLAW02 (Lawson Valley Creek 2).
Temporal Representation:	Surveys done May 6, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42812, Benthic Community Effects

Region 9

Lawson Creek

LOE ID:	79684
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was taken at one station on Lawson Valley Creek. The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.

Spatial Representation:	Samples were collected at the following station: 909SLAW02 (Lawson Valley Creek 2).
Temporal Representation:	Surveys done May 6, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008

DECISION ID	42770	Region 9
Lawson Creek		

Pollutant:	Metals
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 2 samples exceeded the CTR values for selected metals and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 42770, Metals		Region 9
Lawson Creek		

LOE ID:	26404
Pollutant:	Metals
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality:	Two samples were collected at Lawson Valley Creek station 2, 909SLAW02 during the months of June 2005, and April 2006, for the following constituents: aluminum, arsenic, cadmium, copper, silver, and zinc. None of the 2 samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level (MCL) for aluminum is 1.0 mg /l. Water Quality Control for the San Diego Basin. 2007. The dissolved chronic criterion for the following metals applies: arsenic 150 Åµg/l (ppb), cadmium 2.2 Åµg/l (ppb), copper 9.0 Åµg/l (ppb), zinc 120 Åµg/l (ppb), chromium 11 Åµg/l (ppb), manganese 0.05 mg/l, nickel 52 Åµg/l (ppb), lead 2.5 Åµg/l (ppb), and silver 3.4Åµg/l (ppb). California Toxics Rule. 2007.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco. CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Lawson Valley Creek station 2, 909SLAW02; (Latitude 37.7540, Longitude -116.7788).
Temporal Representation:	Water samples were collected on June 2005 and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey. CA

DECISION ID	44593	Region 9
Lawson Creek		

Pollutant:	Ammonia as Nitrogen Phosphorus Sulfates Total Nitrogen as N
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.2 of the Listing Policy. Under sections 3.1 and 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess these pollutants. None of the 2 samples exceed the water quality objectives.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 2 samples exceeded the Basin Plan objectives for ammonia, total nitrogen, and phosphorus and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 3. None of the 2 samples exceeded the Basin Plan objective for sulfates and this does not exceed the

allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44593, Multiple Pollutants

Region 9

Lawson Creek

LOE ID:	26406
Pollutant:	Ammonia as Nitrogen Phosphorus Sulfates Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two samples were collected at Lawson Valley Creek station 909SLAW02 during the months of June 2005 and April 2006, for conventional inorganics analyses. None of the samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Ammonia as N 0.025 mg/l, nitrogen total a ratio of N:P = 10:1, on a weight to weight basis shall be used, Phosphorus, total 0.05 mg/l, and sulfate 250 mg/l.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Lawson Valley Creek station 909SLAW02; (Latitude 37.7540, Longitude -116.7788).
Temporal Representation:	Water samples were collected on June 2005, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID

42804

Region 9

Lawson Creek

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the

2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 2 samples exceeded the CTR value for PCBs and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42804, PCBs (Polychlorinated biphenyls)

Region 9

Lawson Creek

LOE ID:	26408
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Two samples were collected at Lawson Valley Creek station 909SLAW02 during the months of June 2005, and April 2006, for PCBs analyses. None of the 2 samples showed excessive concentrations.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan; waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCL 0.5 ug/l) specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Lawson Valley Creek station 2, 909SLAW02; (Latitude 37.7540, Longitude -116.7788).
Temporal Representation:	Water samples were collected on June 2005 and April 2006.
Environmental Conditions:	

QAPP Information:

Quality control for chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

[2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pauma Creek](#)
Water Body ID: CAR9032200020081223083119
Water Body Type: River & Stream

DECISION ID	43858	Region 9
Pauma Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. 1 of 1 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 1 of 1 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43858, Benthic Community Effects	Region 9
Pauma Creek	

LOE ID: 26437

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Preservation of Areas of Special Biological Significance

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken on November 2000 at one sampling site. Of the total number of samples, the one sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 903PCPMPx on Pauma Creek.
Temporal Representation:	Sampling occurred during one event on November 2000.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Doane Creek](#)
Water Body ID: CAR9032200020081222141738
Water Body Type: River & Stream

DECISION ID	44371	Region 9
Doane Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44371, Benthic Community Effects	Region 9
Doane Creek	

LOE ID: 26830
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 7

Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Seven samples of IBI data were taken from May 2004 to May 2007 at one sampling site. Of the total number of samples, none of the samples exceeded the IBI impairment threshold.
Data Reference:	Stream Bioassessment Data. Co-permittee Data. Collected 2002-2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: REF-DC on Doane Creek.
Temporal Representation:	Sampling occurred during May and October annually over a three year period from May 2004 to October 2006 and during May in 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.
QAPP Information Reference(s):	Quality Assurance Manual for Freshwater Bioassessment Revision 0

Line of Evidence (LOE) for Decision ID 44371, Benthic Community Effects

Region 9

Doane Creek

LOE ID:	79478
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration,

Objective/Criterion Reference:	or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at station 903REF-DC Doane Creek.
Temporal Representation:	The samples were collected in May and October 2004 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 44371, Benthic Community Effects

Region 9

Doane Creek

LOE ID:	77729
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Zero of the eight samples collected had IBI scores above 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions. The dataset uses the old 0-70 IBI scoring.
Guideline Reference:	

Spatial Representation:	The samples were collected at station 903REF-DC Doane Creek.
Temporal Representation:	The samples were collected in May and October 2004 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	49038	Region 9
Doane Creek		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 9 samples exceeded the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 9 samples exceeded the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49038, Temperature, water	Region 9
Doane Creek	

LOE ID:	73503
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 9 samples exceeded the evaluation guideline for temperature in this water

Data Reference:	body. Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Å°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Evaluation Guideline: Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA, Davis
Spatial Representation:	Samples were collected at station SLR-080 (Pauma Creek).
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Roblar Creek](#)
Water Body ID: CAR9022100020081223075955
Water Body Type: River & Stream

DECISION ID	43847	Region 9
Roblar Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 0 of 4 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 0 of 4 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43847, Benthic Community Effects

Roblar Creek

LOE ID: 26442
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 4

Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from May 2001 to 2007 at one sampling site. Of the total number of samples, none of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 902ROBDLZ on Roblar Creek.
Temporal Representation:	Sampling occurred during four events over a seven year period from from May 2001 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Bell Canyon Creek](#)
Water Body ID: CAR9012000020090115151948
Water Body Type: River & Stream

DECISION ID	47972	Region 9
Bell Canyon Creek		

Pollutant: Ammonia (Unionized)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47972, Ammonia (Unionized)	Region 9
Bell Canyon Creek	

LOE ID: 73054

Pollutant: Ammonia (Unionized)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of three samples exceeded the water quality objective for unionized ammonia. None of the samples showed detectable levels of total ammonia.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station REF-BC.
Temporal Representation:	Samples were collected on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47973	Region 9
Bell Canyon Creek		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47973, Arsenic	Region 9
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Bell Canyon Creek

LOE ID:	73042
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the two samples exceeded the water quality criterion for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	42338	Region 9
Bell Canyon Creek		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s)
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samples that exceed water quality objectives.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded. What data is available does not indicate that the benthic community exhibits significant degradation when compared to reference. Furthermore, additional data has been collected on multiple sections of Bell Creek which support the future splitting of the waterbody based upon point source discharges.

Line of Evidence (LOE) for Decision ID 42338, Benthic Community Effects

Region 9

Bell Canyon Creek

LOE ID:	77713
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One out of the three IBI scores were below 40. One station was sampled three times from 2007 to 2009. The scores were, spring 2007: 65.8, spring 2008: 42.9, and spring 2009: 37.2.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment based on a 1-100 point scale that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at reference station, REF-BC: Bell Creek.
Temporal Representation:	The samples were collected in the spring of 2007, 2008, and 2009.
Environmental Conditions:	
QAPP Information:	The taxonomic analysis followed the guidelines of the Southern California Freshwater and Marine Invertebrate Taxonomic Associations (SAFIT, SCAMIT). All stream bioassessment sample collection and taxonomic analysis follow the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan. The California Stream Bioassessment Procedure was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42338, Benthic Community Effects

Region 9

Bell Canyon Creek

LOE ID:	73060
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Two of the four samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction, Selenastrum growth, and Hyallela survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station REF-BC Bell Creek.
Temporal Representation:	The sample was collected from June 2006 to June 2010.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42338, Benthic Community Effects

Region 9

Bell Canyon Creek

LOE ID:	80747
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples were collected at one station in Bell Creek. One sample had a CSCI score below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

Region 9 CSCI Scores & Water Body Information

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at REF-BC
Temporal Representation:	The samples were collected in 2007, 2008, and 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 42338, Benthic Community Effects

Region 9

Bell Canyon Creek

LOE ID:	26520
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken on May 2001 at two sampling sites. Of the total number of samples, all two samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the

biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference:

[A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation:

Samples were collected at two sites: 901BCCBCT and 901BCCSRT on Bell Canyon Creek.

Temporal Representation:

Sampling occurred during one event on May 2001.

Environmental Conditions:

QAPP Information:

Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.

QAPP Information Reference(s):

[State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan](#)

DECISION ID	47974	Region 9
Bell Canyon Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47974, Cadmium	Region 9
Bell Canyon Creek	

LOE ID: 73043

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted water quality criteria for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47974, Cadmium
Bell Canyon Creek

Region 9

LOE ID:	73044
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.

Guideline Reference:

Spatial Representation:

Samples were collected from Bell Canyon Creek (REF-BC).

Temporal Representation:

The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.

Environmental Conditions:

The samples are representative of dry weather conditions.

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	47975	Region 9
Bell Canyon Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47975, Chlorpyrifos	Region 9
Bell Canyon Creek	

LOE ID: 73046

Pollutant: Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of three samples exceed the USEPA Health Advisory 2011 ed., criteria for chlorpyrifos.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA Health Advisory 2011 ed., criteria for chlorpyrifos in freshwater is 2.0 ug/L (represents a life-time risk).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories 2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Samples were collected at Bell Canyon Creek, site REF-BC
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47975, Chlorpyrifos

Bell Canyon Creek

Region 9

LOE ID:	73045
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of three samples exceed the continuous concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

Spatial Representation: Samples were collected at Bell Canyon Creek, site REF-BC
Temporal Representation: Samples were collected from 2007 through 2009.
Environmental Conditions:
QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):

DECISION ID	47976	Region 9
Bell Canyon Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47976, Chromium	Region 9
Bell Canyon Creek	

LOE ID:	73047
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted water quality criteria for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47978	Region 9
Bell Canyon Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47978, Copper
Bell Canyon Creek**

Region 9

LOE ID:	73048
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted water quality criteria for copper.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 47979
Bell Canyon Creek**

Region 9

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47979, Diazinon Bell Canyon Creek

Region 9

LOE ID:	73049
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of three samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Samples were collected at Bell Canyon Creek, site REF-BC
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

Line of Evidence (LOE) for Decision ID 47979, Diazinon**Region 9****Bell Canyon Creek**

LOE ID:	77714
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of three samples exceed the CADPH Notification Level for Diazinon criteria.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) Notification Level for Diazinon is 1.2 ug/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Samples were collected at Bell Canyon Creek, site REF-BC
Temporal Representation:	Samples were collected from June 2007 through April 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID**47981****Region 9****Bell Canyon Creek**

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47981, Lead
Bell Canyon Creek**

Region 9

LOE ID:	73050
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted water quality criteria for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 47984
Bell Canyon Creek

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
- 3.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria for MUN and 0 of 3 samples exceed the criteria for WARM and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47984, Malathion Bell Canyon Creek

Region 9

LOE ID:	73051
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of three samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington. D.C
Spatial Representation:	Samples were collected at Bell Canyon Creek, site REF-BC
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47984, Malathion
Bell Canyon Creek

Region 9

LOE ID:	77715
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of three samples exceed the CDPH notification level for Malathion criteria of 160.0 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) archived advisory level criteria for malathion in drinking water is 160.0 ug/L.
Guideline Reference:	CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently considered Notification Levels.
Spatial Representation:	Samples were collected at Bell Canyon Creek, site REF-BC
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID 47987
Bell Canyon Creek

Region 9

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47987, Nickel
Bell Canyon Creek****Region 9**

LOE ID:	73053
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted water quality criteria for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Spatial Representation: Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation: The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions: The samples are representative of dry weather conditions.
QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):

DECISION ID	47988	Region 9
Bell Canyon Creek		

Pollutant: Oxygen, Dissolved
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the basin plan objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the basin plan objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47988, Oxygen, Dissolved	Region 9
Bell Canyon Creek	

LOE ID: 73055

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 3 samples exceeded the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the REF-BC station.
Temporal Representation:	Samples were collected annually from 2007 to 2009
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	47991	Region 9
Bell Canyon Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47991, Selenium		Region 9
Bell Canyon Creek		

LOE ID:	73057
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Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The reporting limits for all three non-detect samples exceeded the water quality criterion for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	47993	Region 9
Bell Canyon Creek		
Pollutant:	Silver	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47993, Silver
Bell Canyon Creek**

Region 9

LOE ID:	73058
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted water quality criteria for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 47996
Bell Canyon Creek

Region 9

Pollutant: Temperature, water
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.2 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47996, Temperature, water
Bell Canyon Creek**

Region 9

LOE ID: 73059

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Zero of 3 samples exceeded the objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Å°F above the natural receiving water temperature.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference: [Inland Fishes of California](#)

Spatial Representation:	Samples were collected from the REF-BC station.
Temporal Representation:	Samples were collected annually from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	47997	Region 9
Bell Canyon Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47997, Zinc	Region 9
Bell Canyon Creek	

LOE ID:	73061
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the hardness adjusted water quality criteria for zinc.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Bell Canyon Creek (REF-BC).
Temporal Representation:	The samples were collected from REF-BC on 6/6/07, 5/20/08, and 4/28/09.
Environmental Conditions:	The samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	48000	Region 9
Bell Canyon Creek		
Pollutant:	pH	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Bell Canyon Creek

LOE ID:	73056
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 3 minimums and maximums of pH data had no exceedences.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the REF-BC station.
Temporal Representation:	Samples were collected once a year from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID

53411

Region 9

Bell Canyon Creek

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in water, and waters may be placed on the CWA section 303(d) List for toxicity alone.</p> <p>One line of evidence is available in the administrative record to assess toxicity. Two of the four samples exhibited toxicity. The water segment does have associated pollutant(s) samples that exceed water quality objectives.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p>
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This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the four samples exhibited toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53411, Toxicity

Region 9

Bell Canyon Creek

LOE ID:	73060
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Two of the four samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia reproduction, Selenastrum growth, and Hyallela survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station REF-BC Bell Creek.
Temporal Representation:	The sample was collected from June 2006 to June 2010.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Carroll Canyon](#)
Water Body ID: CAR9061000020090127004841
Water Body Type: River & Stream

DECISION ID	48244	Region 9
Carroll Canyon		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the COLD criteria, 0 of 1 sample exceeds the MUN criteria, and 0 of 5 samples exceed the WARM criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the COLD criteria, 0 of 1 sample exceeds the MUN criteria, and 0 of 5 samples exceed the WARM criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48244, Arsenic	Region 9
Carroll Canyon	

LOE ID: 77993
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 48244, Arsenic
Carroll Canyon**

Region 9

LOE ID:	73122
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation: Data was collected on a single day 6/3/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 48244, Arsenic
Carroll Canyon

Region 9

LOE ID: 73121
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation: Data was collected on a single day 6/3/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 48244, Arsenic
Carroll Canyon

Region 9

LOE ID: 73120
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48245	Region 9
Carroll Canyon		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. One of 1 sample exceeds the criteria for both WARM and COLD.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 1 sample exceeds the criteria for both WARM and COLD and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48245, Bifenthrin
Carroll Canyon**

Region 9

LOE ID:	77994
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 48245, Bifenthrin
Carroll Canyon**

Region 9

LOE ID:	73125
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 48245, Bifenthrin
Carroll Canyon

Region 9

LOE ID:	73124
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48246	Region 9
Carroll Canyon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the WARM criteria and 0 of 1 sample exceeds the MUN criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the WARM criteria and 0 of 1 sample exceeds the MUN criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48246, Cadmium	Region 9
Carroll Canyon	

LOE ID:	73128
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 48246, Cadmium
Carroll Canyon

Region 9

LOE ID:	73126
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48246, Cadmium

Region 9

Carroll Canyon

LOE ID:	73127
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID

48247

Region 9

Carroll Canyon

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48247, Chlorpyrifos Carroll Canyon

Region 9

LOE ID: 77725

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are

Objective/Criterion Reference:	harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48248	Region 9
Carroll Canyon		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48248, Chromium	Region 9
Carroll Canyon	

LOE ID:	73131
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 48248, Chromium
Carroll Canyon**

Region 9

LOE ID:	73130
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples

Data Reference:	exceed the criterion for Chromium. Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48249	Region 9
Carroll Canyon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria for COLD and 0 of 1 sample exceeds the criteria for MUN.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria for COLD and 0 of 1 sample exceeds the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48249, Copper**Region 9****Carroll Canyon**

LOE ID:	73133
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48249, Copper**Region 9****Carroll Canyon**

LOE ID:	73132
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48250	Region 9
Carroll Canyon		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48250, Cypermethrin	Region 9
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Carroll Canyon

LOE ID:	73134
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48250, Cypermethrin

Region 9

Carroll Canyon

LOE ID:	73135
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48251	Region 9
Carroll Canyon		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 48251, Deltamethrin**Region 9****Carroll Canyon**

LOE ID:	73136
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID**48252****Region 9****Carroll Canyon**

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 48252, Diazinon
Carroll Canyon**

Region 9

LOE ID:	73137
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll

Canyon Creek - 906LPC-TWAS-1]
Temporal Representation: Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID	48253	Region 9
Carroll Canyon		

Pollutant: Esfenvalerate/Fenvalerate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48253, Esfenvalerate/Fenvalerate	Region 9
Carroll Canyon	

LOE ID: 73138

Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	48254	Region 9
Carroll Canyon		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48254, Lead
Carroll Canyon**

Region 9

LOE ID:	73140
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 48254, Lead
Carroll Canyon**

Region 9

LOE ID:	73139
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48255	Region 9
Carroll Canyon		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 	

samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48255, Malathion

Region 9

Carroll Canyon

LOE ID:	73141
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

48256

Region 9

Carroll Canyon

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48256, Nickel Carroll Canyon

Region 9

LOE ID: 73142

Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.

Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
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SWAMP Data:	Non-SWAMP
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Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR
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Objective/Criterion Reference:	contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 48256, Nickel
Carroll Canyon**

Region 9

LOE ID:	73143
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID

48259

Region 9

Carroll Canyon

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48259, Nitrate/Nitrite (Nitrite + Nitrate as N)

Region 9

Carroll Canyon

LOE ID: 73144

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation: Data was collected on a single day 6/3/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	48260	Region 9
Carroll Canyon		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48260, Nitrogen, Nitrite	Region 9
Carroll Canyon	

LOE ID:	73145
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 48257 Region 9	
Carroll Canyon	
Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48257, Selenium**Region 9****Carroll Canyon**

LOE ID:	77997
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID**48258****Region 9****Carroll Canyon**

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5</p>

samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48258, Zinc
Carroll Canyon**

Region 9

LOE ID:	73149
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 48258, Zinc

Region 9

Carroll Canyon

LOE ID: 73148

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Carroll Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Soledad Canyon - 906_SMC00710]

Temporal Representation: Data was collected on a single day 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID 44190

Region 9

Carroll Canyon

Pollutant: Benthic Community Effects
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status Revised
Sources: Hydromodification | Illicit Connections/Illegal Hook-ups/Dry Weather Flows | Source Unknown | Unknown Nonpoint Source | Unknown Point Source | Urban Runoff/Storm Sewers

Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 44190, Benthic Community Effects
Carroll Canyon**

Region 9

LOE ID: 81138

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 12
Number of Exceedances: 12

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Twelve of the twelve samples collected had an IBI score below 40. NPDES bioassessment
Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired

Guideline Reference:	conditions. A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The samples were collected at one station on Carroll Canyon Creek. The station had three different names, CCC-805, PC-TWAS-1, and LPC-TWAS-1.
Temporal Representation:	The samples were collected in May and October from 2001 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44190, Benthic Community Effects

Region 9

Carroll Canyon

LOE ID:	79577
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	9
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Thirteen samples were collected at two stations. Nine samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The sample were collected at 906_SMC00710 and 906LPC-TWAS-1. Note LPC-TWAS-1/PC-TWAS-1/CCC-805 located at the same sample point.

Temporal Representation:	The samples were collected from 2001 to 2009
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

Line of Evidence (LOE) for Decision ID 44190, Benthic Community Effects	Region 9
Carroll Canyon	

LOE ID:	26559
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four samples of IBI data were taken from May 1999 to November 2000 at one sampling site. Of the total number of samples, all four samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 906CCC805 on Carroll Canyon Creek.
Temporal Representation:	Sampling occurred during two events annually over a two year period from May 1998 to May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44190, Benthic Community Effects**Region 9****Carroll Canyon**

LOE ID:	73125
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Carroll Canyon to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Carroll Canyon was collected at 1 monitoring site [Carroll Canyon Creek - 906LPC-TWAS-1]
Temporal Representation:	Data was collected over the time period 9/27/2007-2/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 44190, Benthic Community Effects**Region 9****Carroll Canyon**

LOE ID:	73123
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 7.2. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected at 906_SMC00710, Soledad Canyon.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 44190, Benthic Community Effects Carroll Canyon

Region 9

LOE ID:	73146
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Two of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included growth of <i>Selenastrum capricornutum</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there

is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:

The samples were collected at station 906LPC-TWAS-1 Carroll Canyon Creek.

Temporal Representation:

The samples were collected from 2007 to 2008.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

DECISION ID	48949	Region 9
Carroll Canyon		

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status for toxicity in water, and waters may be placed on the CWA section 303(d) List for toxicity alone.

Two lines of evidence are available in the administrative record to assess toxicity. Two of the five samples exhibited toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the five samples exhibited toxicity, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48949, Toxicity	Region 9
Carroll Canyon	

LOE ID:	73147
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC00710, Soledad Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48949, Toxicity Carroll Canyon

Region 9

LOE ID:	73146
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to test for toxicity. Two of the four samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included growth of <i>Selenastrum capricornutum</i> and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:

The samples were collected at station 906LPC-TWAS-1 Carroll Canyon Creek.

Temporal Representation:

The samples were collected from 2007 to 2008.

Environmental Conditions:

QAPP Information:

The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Weaver Creek](#)
Water Body ID: CAR9031200020090116003428
Water Body Type: River & Stream

DECISION ID	43995	Region 9
Weaver Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample exceeded the Index of Biological Integrity (IBI) value of poor water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met as California Stream Condition Index Scores were not calculated for prior listing cycles.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43995, Benthic Community Effects	Region 9
Weaver Creek	

LOE ID: 26550

Pollutant: Benthic Community Effects

LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken from June 2002 at one sampling site. Out of the total number of samles, one of the samples exceed the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at one site: 903SLWVR1 on Weaver Creek.
Temporal Representation:	Sampling occurred during one event on June 23, 2002.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Gird Creek](#)
Water Body ID: CAR9031200020090202031512
Water Body Type: River & Stream

DECISION ID	42651	Region 9
Gird Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42651, Benthic Community Effects	Region 9
Gird Creek	

LOE ID: 79483
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following station: 903SLGRD2
Temporal Representation:	Survey done May 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008

Line of Evidence (LOE) for Decision ID 42651, Benthic Community Effects

Region 9

Gird Creek

LOE ID:	26831
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three samples of IBI data were taken from June 2003 to June 2006 at two sampling sites. Of the total number of samples, all three samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic

substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference:

[A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation:

Samples were collected at two sites: 903GIR2xx and 903SLGRD2 on Gird Creek.

Temporal Representation:

Sampling occurred during one event on June 2003, July 2004, and June 2006.

Environmental Conditions:

QAPP Information:

Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.

QAPP Information Reference(s):

[State of California, California Monitoring and Assessment Program: "CMAP".](#)
[Quality Assurance Project Plan for the California Stream Bioassessment Procedure](#)
[The San Diego Stream Team Quality Assurance Project Plan](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Vicente Creek \(San Diego County\)](#)
Water Body ID: CAR9072200020081210155551
Water Body Type: River & Stream

DECISION ID	43872	Region 9
San Vicente Creek (San Diego County)		

Pollutant: Benthic Community Effects
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Regional Board Conclusion:

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 5 of 6 samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 5 of 6 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy, however as required under section 3.9 of the Listing Policy, pollutant(s) could not be directly associated with the Benthic Community Effects.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

State Board Review and Conclusion:

State Water Board staff used section 3.11 situation-specific weight of evidence approach to evaluate Benthic Community Effects for placement on the section 303(d) list. State Water Board staff determined that it is necessary to include these listings because additional data analyses and multiple line of evidence show that benthic macroinvertebrate populations are impacted by a wide range of stressors.

Multiple lines of evidence are available in the administrative record to assess this pollutant. The water quality chemistry and bioassessment data provide a substantial basis that benthic macroinvertebrate populations are impacted by a wide range of anthropogenic stressors.

Based on the available data and information, the weight of evidence indicates there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list.

Regional Board Decision Recommendation:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43872, Benthic Community Effects

Region 9

San Vicente Creek (San Diego County)

LOE ID:	26854
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six samples of IBI data were taken on November 2000 to 2007 at two sampling sites. Out of the total number of samples, five samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data Southern California Postfire Study. Index of Biotic Integrity. 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 907SVWCRx and 907SDSVC3 on San Vicente Creek.
Temporal Representation:	Sampling occurred during six events from November 2000 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Pollutant:	Ammonia as Nitrogen
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess pollutant. Two of the five samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of five samples exceeded the OBJECTIVE and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43873, Ammonia as Nitrogen	Region 9
San Vicente Creek (San Diego County)	

LOE ID:	31428
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of the 5 samples collected at San Vicente Creek exceed the water quality objective for un-ionized ammonia as N.
Data Reference:	Surface Water Ambient Monitoring Program Report on the San Diego Hydrologic Unit: Final Technical Report 2007
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan the WQO for un-ionized ammonia (NH3) for inland surface waters is

Objective/Criterion Reference: 0.025mg/L (as N).
[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Water samples were collected at San Vicente Creek station 907SDSVC4; (Latitude 32.9934, Longitude -116.8498).

Temporal Representation: Data was collected during 2002.

Environmental Conditions:
QAPP Information: Data collected and measured as per the SWAMP Quality Assurance Management Plan (QAMP).

QAPP Information Reference(s):

DECISION ID	44832	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Four of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 5 samples exhibits significant toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44832, Toxicity	Region 9
San Vicente Creek (San Diego County)	

LOE ID: 31431

Pollutant: Toxicity

LOE Subgroup:	Toxicity
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Chronic water toxicity was evaluated with 7-day exposures on the water flea, <i>Ceriodaphnia dubia</i> , and 96-hour exposures to the alga <i>Selenastrum capricornutum</i> . Four out of 5 samples exhibit significant toxicity.
Data Reference:	Surface Water Ambient Monitoring Program Report on the San Diego Hydrologic Unit: Final Technical Report 2007
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples meeting the following criteria were considered toxic: 1) treatment responses significantly different from controls, as determined by a statistical t-test; and 2) endpoints less than 80% of controls.
Guideline Reference:	Surface Water Ambient Monitoring Program Report on the San Diego Hydrologic Unit: Final Technical Report 2007
Spatial Representation:	Water samples were collected at San Vicente Creek station 907SDSVC4; (Latitude 32.9934, Longitude -116.8498).
Temporal Representation:	Data was collected between 2004 and 2006.
Environmental Conditions:	
QAPP Information:	Data collected and measured as per the SWAMP Quality Assurance Management Plan (QAMP).
QAPP Information Reference(s):	

DECISION ID	49109	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the CRITERIA and this sample size is insufficient to determine, with
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the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49109, Cadmium
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76269
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49109, Cadmium
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76268
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49110	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the zero (seven were collected, but detection limit is greater than evaluation guideline) samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the GUIDELINE and this sample size is insufficient to determine,

with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49110, Chlorpyrifos
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	78127
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 8/17/2004-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49110, Chlorpyrifos
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76275
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 8/17/2004-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49111	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49111, Copper
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76277
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49111, Copper
San Vicente Creek (San Diego County)**

Region 9

LOE ID: 76276

Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49112	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49112, Diazinon
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76278
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 8/17/2004-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49112, Diazinon
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	78125
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 8/17/2004-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49113		Region 9
San Vicente Creek (San Diego County)		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49113, Lead
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76261
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49113, Lead
San Vicente Creek (San Diego County)**

Region 9

LOE ID: 76260

Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49114	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49114, Malathion
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	78126
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 8/17/2004-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49114, Malathion
San Vicente Creek (San Diego County)**

Region 9

LOE ID: 76262

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 8/17/2004-6/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49119	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49119, Nitrate/Nitrite (Nitrite + Nitrate as N)
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76263
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 1 monitoring site [San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected on a single day 9/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 49121
San Vicente Creek (San Diego County)**

Region 9

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49121, Nitrogen, Nitrite
San Vicente Creek (San Diego County)**

Region 9

LOE ID: 76264

Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 1

Temporal Representation:	monitoring site [San Vicente Creek @ Wildcat Canyon Road]
Environmental Conditions:	Data was collected over the time period 6/23/2003-9/10/2003.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49120	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49120, Nitrogen, ammonia (Total Ammonia)		Region 9
San Vicente Creek (San Diego County)		

LOE ID:	76267
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 1 monitoring site [San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected over the time period 6/23/2003-6/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49122		Region 9
San Vicente Creek (San Diego County)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of eight samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 3.1 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the	

Line of Evidence (LOE) for Decision ID 49122, Zinc
San Vicente Creek (San Diego County)
Region 9

LOE ID:	76266
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49122, Zinc
San Vicente Creek (San Diego County)
Region 9

LOE ID:	76270
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San

	Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ San Vicente Road, San Vicente Creek @ Wildcat Canyon Road]
Temporal Representation:	Data was collected 6/23/2003 - 1/1/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53445	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Seven of seven samples exceed the water quality objective for enterococcus of a SSM of 61/100 ml for the protection of REC-1 beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of seven samples exceed the water quality objective for enterococcus of a SSM of 61/100 ml for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 53445, Indicator Bacteria
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76258
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 6/23/2003-7/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 53445, Indicator Bacteria
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	76259
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 6/23/2003-7/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53445, Indicator Bacteria

Region 9

San Vicente Creek (San Diego County)

LOE ID:	76265
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County) to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County) was collected at 2 monitoring sites [San Vicente Creek @ Wildcat Canyon Road, San Vicente Creek @ San

Temporal Representation: Vicente Road]
 Environmental Conditions: Data was collected over the time period 6/23/2003-7/24/2008.
 QAPP Information: Staff is not aware of any special conditions that might affect interpretation of the data.
 The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
 QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	43874	Region 9
San Vicente Creek (San Diego County)		

Pollutant: Phosphorus
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Two of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 5 samples exceeded the water quality objective for total phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43874, Phosphorus	Region 9
San Vicente Creek (San Diego County)	

LOE ID: 31427

Pollutant: Phosphorus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Two of the 5 samples collected at San Vicente Creek exceed the water quality objective for total phosphorus.
Data Reference:	Surface Water Ambient Monitoring Program Report on the San Diego Hydrologic Unit: Final Technical Report 2007
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. For inland surface waters-streams and other flowing waters, with all beneficial uses, the water quality objective for total phosphorus is 0.1 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at San Vicente Creek station 907SDSVC4; (Latitude 32.9934, Longitude -116.8498).
Temporal Representation:	Data was collected during 2002.
Environmental Conditions:	
QAPP Information:	Data collected and measured as per the SWAMP Quality Assurance Management Plan (QAMP).
QAPP Information Reference(s):	

DECISION ID	44573	Region 9
San Vicente Creek (San Diego County)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Four of the samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 4 samples exceeded the water quality objective for sulfates and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 44573, Sulfates
San Vicente Creek (San Diego County)

Region 9

LOE ID: 31429

Pollutant: Sulfates
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Four of the 4 samples collected at San Vicente Creek exceed the water quality objective for sulfates.
Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: For inland surface waters in the San Vicente HA and all beneficial uses, the WQO for sulfate is 65 mg/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Water samples were collected at San Vicente Creek station 907SDSVC4; (Latitude 32.9934, Longitude -116.8498).
Temporal Representation: Data was collected in 2004 and 2005.
Environmental Conditions:
QAPP Information: Data collected and measured as per the SWAMP Quality Assurance Management Plan (QAMP).
QAPP Information Reference(s):

DECISION ID 44544
San Vicente Creek (San Diego County)

Region 9

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 4 samples exceeded the water quality objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44544, pH
San Vicente Creek (San Diego County)**

Region 9

LOE ID:	31430
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three of the 4 samples collected at San Vicente Creek exceed the water quality objective for pH.
Data Reference:	Surface Water Ambient Monitoring Program Report on the San Diego Hydrologic Unit: Final Technical Report 2007
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	For inland surface waters and all beneficial uses, the WQO for pH is 6.5 (minimum) to 8.5 (maximum).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at San Vicente Creek station 907SDSVC4; (Latitude 32.9934, Longitude -116.8498).
Temporal Representation:	Data was collected during 2002.
Environmental Conditions:	
QAPP Information:	Data collected and measured as per the SWAMP Quality Assurance Management Plan (QAMP).
QAPP Information Reference(s):	

**DECISION ID 44543
San Vicente Creek (San Diego County)**

Region 9

Pollutant:	Total Nitrogen as N
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. (with update to table 3.1)</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Five of the five samples exceed the water quality criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of five samples exceed the water quality criterion for total nitrogen and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44543, Total Nitrogen as N
San Vicente Creek (San Diego County)

Region 9

LOE ID:	31426
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	Five of the 5 samples collected at San Vicente Creek show excessive nitrogen concentrations.
Data Reference:	Surface Water Ambient Monitoring Program Report on the San Diego Hydrologic Unit: Final Technical Report 2007
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial

Objective/Criterion Reference:	uses Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at San Vicente Creek station 907SDSVC4; (Latitude 32.9934, Longitude -116.8498).
Temporal Representation:	Data was collected during 2002.
Environmental Conditions:	
QAPP Information:	Data collected and measured as per the SWAMP Quality Assurance Management Plan (QAMP).
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Boden Canyon](#)
Water Body ID: CAR9055100020090204012532
Water Body Type: River & Stream

DECISION ID	43419	Region 9
Boden Canyon		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. 1 of 2 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 1 of 2 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43419, Benthic Community Effects	Region 9
Boden Canyon	

LOE ID: 26849
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 2
Number of Exceedances: 1

Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken on May 2001 at two sampling sites. Of the total number of samples, one sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 905BCN1xx and 905BCN2xx on Boden Creek. Sampling occurred during one event on May 2001.
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Cedar Creek \(San Diego County\)](#)
Water Body ID: CAR9074100020090204013146
Water Body Type: River & Stream

DECISION ID 51651 **Region 9**
Cedar Creek (San Diego County)

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51651, Alkalinity as CaCO₃ **Region 9**
Cedar Creek (San Diego County)

LOE ID: 73177
Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51651, Alkalinity as CaCO3

Region 9

Cedar Creek (San Diego County)

LOE ID:	73176
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51652	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51652, Aluminum	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73160
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51652, Aluminum

Region 9

Cedar Creek (San Diego County)

LOE ID:	73161
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51652, Aluminum
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73178
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51653

Region 9

Cedar Creek (San Diego County)

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one water and zero of the one sediment samples exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water and zero of one sediment samples exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51653, Arsenic
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73169
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51653, Arsenic
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73165
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51653, Arsenic
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73166
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51653, Arsenic

Region 9

Cedar Creek (San Diego County)

LOE ID:	73167
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51653, Arsenic

Region 9

Cedar Creek (San Diego County)

LOE ID:	73168
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	42271	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does not satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 42271, Benthic Community Effects
Cedar Creek (San Diego County)**

Region 9

LOE ID:	26850
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken on May 2001 at one sampling site. Zero out of one sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at one site: 907CCCCRx on Cedar Creek.
Temporal Representation:	Sampling occurred during one event on May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

**Line of Evidence (LOE) for Decision ID 42271, Benthic Community Effects
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73171
Pollutant:	Benthic-Macroinvertebrate Bioassessments

LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the two samples collected had an IBI score below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions. The dataset uses the old 0-70 IBI scoring.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations REF-CC and REF-CC2, Cedar Creek.
Temporal Representation:	The samples were collected in May 2003 and 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 42271, Benthic Community Effects
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73170
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the 1 IBIs score for this water body was below the level which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: (907CCCR02) Cedar Creek 2.
Temporal Representation:	Survey done May 8, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 42271, Benthic Community Effects
Cedar Creek (San Diego County)**

Region 9

LOE ID:	72757
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. The IBI score for this site was 69.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected from Cedar Creek ~1.5mi above San Diego R.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42271, Benthic Community Effects

Region 9

Cedar Creek (San Diego County)

LOE ID:	79672
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three samples were collected from three stations in Cedar Creek. All scores are above the 0.79 threshold, and therefore the site is not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 907S01418 907CCCRO2 907REF-CC
Temporal Representation:	Surveys done in 2003, 2008, 2009
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project, the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the SWAMP RWB9 Stormwater Monitoring Council CY 2009.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

DECISION ID 51655

Region 9

Cedar Creek (San Diego County)

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51655, Bifenthrin Cedar Creek (San Diego County)

Region 9

LOE ID: 73172

Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51655, Bifenthrin

Region 9

Cedar Creek (San Diego County)

LOE ID: 73173

Pollutant: Bifenthrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 51661

Region 9

Cedar Creek (San Diego County)

Pollutant: Cadmium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one water and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one water and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 51661, Cadmium
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73174
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51661, Cadmium
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73175
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51661, Cadmium
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73181
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51661, Cadmium
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73180
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51661, Cadmium
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73179
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51662

Region 9

Cedar Creek (San Diego County)

Pollutant:	Chloride
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51662, Chloride
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73185
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 50 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51662, Chloride
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73184
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Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51662, Chloride
Cedar Creek (San Diego County)

Region 9

LOE ID:	73182
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 50 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation:

Data was collected on a single day 5/12/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

51664

Region 9

Cedar Creek (San Diego County)

Pollutant:

Chromium

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

Impairment from Pollutant or

Pollutant

Pollution:

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water sample and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision

Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51664, Chromium

Region 9

Cedar Creek (San Diego County)

LOE ID:

73189

Pollutant:

Chromium

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51664, Chromium

Region 9

Cedar Creek (San Diego County)

LOE ID:	73188
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51664, Chromium

Region 9

Cedar Creek (San Diego County)

LOE ID: 73190

Pollutant: Chromium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51664, Chromium

Region 9

Cedar Creek (San Diego County)

LOE ID: 73186

Pollutant: Chromium

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51664, Chromium
Cedar Creek (San Diego County)

Region 9

LOE ID:	73187
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for

Guideline Reference:	sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51668	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sediment sample and zero of one water sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51668, Copper	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73195
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51668, Copper Cedar Creek (San Diego County)

Region 9

LOE ID:	73193
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51668, Copper
Cedar Creek (San Diego County)

Region 9

LOE ID: 73194

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51668, Copper
Cedar Creek (San Diego County)

Region 9

LOE ID: 73191

Pollutant: Copper
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51668, Copper
Cedar Creek (San Diego County)

Region 9

LOE ID:	73192
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	51669	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51669, Cyfluthrin	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73197
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51669, Cyfluthrin

Region 9

Cedar Creek (San Diego County)

LOE ID:	73196
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

DECISION ID	51670	Region 9
Cedar Creek (San Diego County)		

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51670, Cyhalothrin, Lambda	Region 9
Cedar Creek (San Diego County)	

LOE ID: 73198

Pollutant: Cyhalothrin, Lambda
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51670, Cyhalothrin, Lambda
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73199
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 51673
Cedar Creek (San Diego County)**

Region 9

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51673, Cypermethrin Cedar Creek (San Diego County)

Region 9

LOE ID:	73201
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51673, Cypermethrin
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73200
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51675

Region 9

Cedar Creek (San Diego County)

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51675, Deltamethrin
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73203

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.

Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51675, Deltamethrin
Cedar Creek (San Diego County)

Region 9

LOE ID:	73202
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51677

Region 9

Cedar Creek (San Diego County)

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51677, Esfenvalerate/Fenvalerate
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73204
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51677, Esfenvalerate/Fenvalerate

Region 9

Cedar Creek (San Diego County)

LOE ID:	73205
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51679**Region 9****Cedar Creek (San Diego County)**

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51679, Fenpropathrin
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73207
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51679, Fenpropathrin
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73206
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51680	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51680, Iron
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73208

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 0.3 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51680, Iron
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73210

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51680, Iron

Region 9

Cedar Creek (San Diego County)

LOE ID:	73209
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

51725

Region 9

Cedar Creek (San Diego County)

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water sample and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water sediment and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51725, Lead Cedar Creek (San Diego County)

Region 9

LOE ID:	73211
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51725, Lead
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73214
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51725, Lead
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73213
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Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51725, Lead
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73212
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51726	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51726, Manganese	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73216
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51726, Manganese
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73215
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The SWAMP QAPP (2008) was followed.
 QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51726, Manganese	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73217
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51728	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sediment sample and zero of the one water sample exceed the GUIDELINE and CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sediment sample and zero of one water sample exceeded the GUIDELINE and CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51728, Nickel
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73219
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51728, Nickel
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73222
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51728, Nickel
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73221
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51728, Nickel
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73220
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51728, Nickel
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73218
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Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51736	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51736, Nitrate/Nitrite (Nitrite + Nitrate as N)
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73223
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51738

Region 9

Cedar Creek (San Diego County)

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51738, Nitrogen, Nitrite
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73224
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE/CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the GUIDELINE/CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51737, Nitrogen, ammonia (Total Ammonia)	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73164
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in

Objective/Criterion Reference:	concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51737, Nitrogen, ammonia (Total Ammonia)	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73163
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51737, Nitrogen, ammonia (Total Ammonia)	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73162
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51739	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51739, Oxygen, Dissolved
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73226
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51739, Oxygen, Dissolved
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73225
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51740	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51740, Permethrin, total
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73228
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51740, Permethrin, total
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73227
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51743	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51743, Selenium
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73233

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51743, Selenium
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73231

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51743, Selenium

Region 9

Cedar Creek (San Diego County)

LOE ID:	73232
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51744

Region 9

Cedar Creek (San Diego County)

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51744, Silver
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73234
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51744, Silver
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73236

Pollutant: Silver
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation: Data was collected on a single day 5/12/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**Line of Evidence (LOE) for Decision ID 51744, Silver
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73235

Pollutant: Silver
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51746	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Specific Conductivity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51746, Specific Conductivity	Region 9
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Cedar Creek (San Diego County)

LOE ID:	73237
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51748	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the one samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. One of one samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51748, Sulfates
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73238
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51748, Sulfates
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73239
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 65 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51748, Sulfates

Region 9

Cedar Creek (San Diego County)

LOE ID:	73240
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 65 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]

Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51750	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51750, Temperature, water		Region 9
Cedar Creek (San Diego County)		

LOE ID:	73241
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Å°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51752	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51752, Total Dissolved Solids	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73243
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 300 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51752, Total Dissolved Solids
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73242
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51752, Total Dissolved Solids
Cedar Creek (San Diego County)

Region 9

LOE ID:	73244
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 300 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51755

Region 9

Cedar Creek (San Diego County)

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51755, Toxicity
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73245
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).

Guideline Reference:

Spatial Representation: The sample was collected at station 907S01418.

Temporal Representation: The sample was collected in May 2009.

Environmental Conditions:

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.

QAPP Information Reference(s):

DECISION ID	51761	Region 9
Cedar Creek (San Diego County)		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51761, Turbidity	Region 9
Cedar Creek (San Diego County)	

LOE ID:	73246
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51761, Turbidity
Cedar Creek (San Diego County)

Region 9

LOE ID:	73247
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Cedar Creek (San Diego County) within the San Diego Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

DECISION ID	51829	Region 9
Cedar Creek (San Diego County)		

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status. Under 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one water sample and zero of the one sediment sample exceed the CRITERIA and GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water sample and zero of one sediment sample exceeded the CRITERIA and GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51829, Zinc	Region 9
Cedar Creek (San Diego County)	

LOE ID: 73159
Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

Data Reference:	criterion for Zinc. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51829, Zinc

Region 9

Cedar Creek (San Diego County)

LOE ID:	73157
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51829, Zinc

Region 9

Cedar Creek (San Diego County)

LOE ID:	73249
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 51829, Zinc
Cedar Creek (San Diego County)**

Region 9

LOE ID:	73248
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51829, Zinc

Region 9

Cedar Creek (San Diego County)

LOE ID:	73158
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51742

Region 9

Cedar Creek (San Diego County)

Pollutant: pH

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of twenty-six samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51742, pH
Cedar Creek (San Diego County)**

Region 9

LOE ID: 73230

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1

Temporal Representation:	monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Environmental Conditions:	Data was collected on a single day 5/12/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed. Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51742, pH
Cedar Creek (San Diego County)

Region 9

LOE ID:	73229
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cedar Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cedar Creek (San Diego County) was collected at 1 monitoring site [Cedar Creek ~1.5mi above San Diego R. - 907S01418]
Temporal Representation:	Data was collected on a single day 5/12/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Cold Stream \(San Diego County\)](#)
Water Body ID: CAR9093500020090204020154
Water Body Type: River & Stream

DECISION ID 42287 **Region 9**
Cold Stream (San Diego County)

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion:

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42287, Benthic Community Effects **Region 9**
Cold Stream (San Diego County)

LOE ID: 26851

Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 3

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: Six samples of IBI data were taken on May 2001 to 2007 at one sampling site. Out of the total number of samples, three samples exceeded the IBI impairment threshold.
Data Reference: [Fish and Game IBI Data](#)
[Southern California Postfire Study. Index of Biotic Integrity. 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at one site: 909CCCSPx on Cold Stream.
Temporal Representation:	Sampling occurred during six events from May 2001 to 2007.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Devils Canyon Creek](#)
Water Body ID: CAR9014000020090204010850
Water Body Type: River & Stream

DECISION ID	42683	Region 9
Devils Canyon Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 1 of 2 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 1 of 2 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42683, Benthic Community Effects	Region 9
Devils Canyon Creek	

LOE ID: 26852
Pollutant: Benthic Community Effects
LOE Subgroup: Adverse Biological Responses

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken on May 2001 and June 2005 at one sampling site. Out of the total number of samples, one sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at one site: 901DCCDCx on Devil Canyon Stream.
Temporal Representation:	Sampling occurred during one event on May 2001 and one event on June 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring and Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Wilson Creek \(San Diego County\)](#)
Water Body ID: CAR9113000020090204021246
Water Body Type: River & Stream

DECISION ID	44677	Region 9
Wilson Creek (San Diego County)		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44677, Benthic Community Effects	Region 9
Wilson Creek (San Diego County)	

LOE ID: 79688

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples were taken at two stations in Wilson Creek. The CSCI scores for this site are above the 0.79 threshold, and therefore the site is not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 911TJWIL3, 911REF-WC
Temporal Representation:	Surveys done in 2005 and 2008
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project and the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.

Line of Evidence (LOE) for Decision ID 44677, Benthic Community Effects
Wilson Creek (San Diego County)

Region 9

LOE ID:	26861
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken on May 2001 at one sampling site. Out of the total number of samples, no samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at one site: 911WLCABL on Wilson Creek.
Temporal Representation:	Sampling occurred during one event on May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 44677, Benthic Community Effects
Wilson Creek (San Diego County)

Region 9

LOE ID:	77192
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 34 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at the following station: 911TJWIL3-Wilson Creek 3.

Temporal Representation: Surveys done May 6, 2008.

Environmental Conditions:

QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44677, Benthic Community Effects
Wilson Creek (San Diego County)

Region 9

LOE ID: 77193

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: The one sample collected had an IBI score above 40. NPDES bioassessment

Data Reference: [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference:

Spatial Representation: The sample was collected at station REF-WC, Wilson Creek.

Temporal Representation: The sample was collected in May 2005.

Environmental Conditions:

QAPP Information: The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Wood Canyon \(Orange County\)](#)
Water Body ID: CAR9011300020090204011348
Water Body Type: River & Stream

DECISION ID 52055 **Region 9**
Wood Canyon (Orange County)

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of eight samples exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52055, Ammonia **Region 9**
Wood Canyon (Orange County)

LOE ID: 77206
Pollutant: Ammonia (Unionized)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 8

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of eight averaged samples exceeded the water quality objective for unionized ammonia. Samples were reported as as total ammonia as nitrogen and were converted to unionized ammonia as nitrogen before being compared with the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station WC-WCT.
Temporal Representation:	Samples were collected from August 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50550	Region 9
Wood Canyon (Orange County)		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of ten samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50550, Arsenic
Wood Canyon (Orange County)**

Region 9

LOE ID:	77194
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the water quality objective for arsenic.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 50551

Region 9

Wood Canyon (Orange County)

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of ten samples did not exceed the criterion or objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples did not exceed the criterion or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50551, Cadmium
Wood Canyon (Orange County)**

Region 9

LOE ID:	77195
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the hardness adjusted water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

Line of Evidence (LOE) for Decision ID 50551, Cadmium**Region 9****Wood Canyon (Orange County)**

LOE ID:	77196
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the water quality objective for cadmium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.
Guideline Reference:	
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID**50582****Region 9****Wood Canyon (Orange County)**

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion or guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the criterion or guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50582, Chlorpyrifos
Wood Canyon (Orange County)**

Region 9

LOE ID:	77197
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of ten samples exceed the continuous concentration for Chlorpyrifos criteria of 14.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L. Ref12
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Ten samples were collected at Wood Canyon (Orange County) site WC-WCT.
Temporal Representation:	Samples were collected from August and September of 2006, May and October of 2007 and 2008 and April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Wood Canyon (Orange County)

LOE ID:	77198
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of ten samples exceed the USEPA Health Advisory 2011 ed., criteria for chlorpyrifos.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA Health Advisory 2011 ed., criteria for chlorpyrifos in freshwater is 2.0 ug/L (represents a life-time risk).
Guideline Reference:	2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Samples were collected at Wood Canyon (Orange County), site WC-WCT.
Temporal Representation:	Samples were collected from August and September of 2006, May and October of 2007 and 2008 and April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown
QAPP Information Reference(s):	

DECISION ID 50575**Region 9****Wood Canyon (Orange County)**

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50575, Chromium
Wood Canyon (Orange County)**

Region 9

LOE ID:	77199
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the hardness adjusted water quality objective for chromium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

50576

Region 9

Wood Canyon (Orange County)

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50576, Copper

Region 9

Wood Canyon (Orange County)

LOE ID: 77200

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the ten samples exceeded the hardness adjusted water quality objective for copper.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50552	Region 9
Wood Canyon (Orange County)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of ten samples exceeded the criterion. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50552, Lead	Region 9
Wood Canyon (Orange County)	

LOE ID:	77203
Pollutant:	Lead

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the hardness adjusted water quality objective for lead.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50584	Region 9
Wood Canyon (Orange County)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of ten samples exceeded the guideline for warm freshwater and zero of nine exceeded the guideline for municipal and domestic use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the guideline for warm freshwater and zero of nine exceeded the guideline for municipal and domestic use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50584, Malathion
Wood Canyon (Orange County)**

Region 9

LOE ID:	77960
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of nine samples exceed the CDPH notification level for Malathion criteria of 160.0 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Public Health (CDPH) archived advisory level criteria for malathion in drinking water is 160.0 ug/L.
Guideline Reference:	Water quality data for Temecula Creek, Murrieta Creek, and the Santa Margarita River, Temecula, CA
Spatial Representation:	Samples were collected at Wood Canyon (Orange County), site WC-WCT.
Temporal Representation:	Samples were collected from August and September of 2006, May and October of 2007 and 2008 and April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 50584, Malathion
Wood Canyon (Orange County)**

Region 9

LOE ID:	77204
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Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of ten samples exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Ten samples were collected at Wood Canyon (Orange County) site WC-WCT.
Temporal Representation:	Samples were collected from August and September of 2006, May and October of 2007 and 2008 and April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	50578	Region 9
Wood Canyon (Orange County)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of ten samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50578, Nickel
Wood Canyon (Orange County)**

Region 9

LOE ID:	77205
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the hardness adjusted water quality objective for nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 50586
Wood Canyon (Orange County)**

Region 9

Pollutant: Oxygen, Dissolved

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of eight samples exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50586, Oxygen, Dissolved
Wood Canyon (Orange County)**

Region 9

LOE ID: 77207

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Zero of 8 samples exceeded the objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10% of the time.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the WC-WCT station.

Temporal Representation:	Samples were collected approximately twice semi-annually from August 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	50580	Region 9
Wood Canyon (Orange County)		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50580, Silver	Region 9
Wood Canyon (Orange County)	

LOE ID:	77210
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the hardness adjusted water quality objective for silver.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50581	Region 9
Wood Canyon (Orange County)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of ten samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Wood Canyon (Orange County)

LOE ID:	77212
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the ten samples exceeded the hardness adjusted water quality objective for zinc.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID 50599

Region 9

Wood Canyon (Orange County)

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of ten samples exceeded the objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of ten samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50599, pH
Wood Canyon (Orange County)**

Region 9

LOE ID:	77208
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 10 minimums and maximums of pH data had no exceedences.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the WC-WCT station.
Temporal Representation:	Samples were collected approximately semi-annually from August 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 43928

Region 9

Wood Canyon (Orange County)

Pollutant:	Benthic Community Effects
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. While sampling was limited to one station, the station was sampled over a period of four years with all samples exhibiting degradation. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 43928, Benthic Community Effects
Wood Canyon (Orange County)**

Region 9

LOE ID:	26862
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two samples of IBI data were taken on May 2001 at two sampling sites. Out of the total number of samples, two samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 901WC2MMx and 901WCEOTx on Wood Canyon Creek.
Temporal Representation:	Sampling occurred during one event on May 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 43928, Benthic Community Effects

Region 9

Wood Canyon (Orange County)

LOE ID:	72797
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Six out of the six IBI scores were below 40. One station was sampled six times from 2006 to 2009. All of the IBI scores were below 20.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	

Temporal Representation:
Environmental Conditions:
QAPP Information: County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program
QAPP Information Reference(s): [Quality Assurance Project Plan for the Orange County Stormwater Program.](#)

Line of Evidence (LOE) for Decision ID 43928, Benthic Community Effects
Wood Canyon (Orange County)

Region 9

LOE ID: 77211

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 10
Number of Exceedances: 6

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Ten samples were collected to test for toxicity. Six of the twelve samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia survival and reproduction, Hyallela survival and Fathead Minnow survival.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation: The sample was collected at station WC-WCT Wood Canyon Creek.
Temporal Representation: The sample was collected from June 2006 to November 2009.
Environmental Conditions:
QAPP Information: The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43928, Benthic Community Effects
Wood Canyon (Orange County)

Region 9

LOE ID: 77209

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All seven samples exceeded the water quality objective for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Wood Canyon Creek (WC-WCT).
Temporal Representation:	Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.
Environmental Conditions:	All of the samples are representative of dry weather conditions.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43928, Benthic Community Effects

Region 9

Wood Canyon (Orange County)

LOE ID:	80739
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	All seven samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in

a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference:

[The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information:

County of Orange NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program

QAPP Information Reference(s):

[Quality Assurance Project Plan for the Orange County Stormwater Program.](#)

Line of Evidence (LOE) for Decision ID 43928, Benthic Community Effects

Region 9

Wood Canyon (Orange County)

LOE ID: 77201

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 10
Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Two of ten samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L at .382 ug/L.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game](#)

Spatial Representation: Samples were collected at Wood Canyon (Orange County) site WC-WCT.
Temporal Representation: Samples were collected from August and September of 2006, May and October of 2007 and 2008 and April 2009.

Environmental Conditions: According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.

QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

DECISION ID

50583

Region 9

Wood Canyon (Orange County)

Pollutant: Diazinon
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 10 samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L for the protection of aquatic life in fresh water. Six of ten samples exhibit significant toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 10 samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L for the protection of aquatic life in fresh water. Six of ten samples exhibit significant toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50583, Diazinon

Region 9

Wood Canyon (Orange County)

LOE ID: 77211

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 10
Number of Exceedances: 6

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Ten samples were collected to test for toxicity. Six of the twelve samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Ceriodaphnia survival and reproduction, Hyallela survival and Fathead Minnow survival.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station WC-WCT Wood Canyon Creek.
Temporal Representation:	The sample was collected from June 2006 to November 2009.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 50583, Diazinon
Wood Canyon (Orange County)**

Region 9

LOE ID:	77201
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of ten samples exceed the continuous concentration for Diazinon criteria of 0.1 ug/L at .382 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Samples were collected at Wood Canyon (Orange County) site WC-WCT.
Temporal Representation:	Samples were collected from August and September of 2006, May and October of 2007 and 2008 and April 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	50579	Region 9
Wood Canyon (Orange County)		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Seven of the seven samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of seven samples exceed the objective, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50579, Selenium	Region 9
Wood Canyon (Orange County)	

LOE ID:	77209
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All seven samples exceeded the water quality objective for selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.

Guideline Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation:

Samples were collected from Wood Canyon Creek (WC-WCT).

Temporal Representation:

Samples were collected from WC-WCT in 2006 - weekly from August through September, and twice per year in Spring and Summer during 2007 and 2008, and on 4/28/2009.

Environmental Conditions:

All of the samples are representative of dry weather conditions.

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton](#)
Water Body ID: CAC9021100020090211141452
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44483	Region 9
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, three of 90 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, three of 90 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton	

LOE ID:	28057
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Camp del Mar, Camp Pendleton, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton		
LOE ID:	27066	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Shellfish Harvesting	
Number of Samples:	86	
Number of Exceedances:	2	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected with 2 samples exceeded the single sample water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program.	

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton**

Region 9

LOE ID:	27067
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected with two samples correlated with a storm event. None of the two samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

LOE ID: 27068

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 86
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected with no sample exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

LOE ID: 27069

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected with 2 samples correlated with a storm event. None of the 2 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton**

Region 9

LOE ID:	27070
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 50 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton**

Region 9

LOE ID:	31345
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 51 dry month (April through October) single samples were collected with 16 dry month geomeans calculated. Zero of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification

Temporal Representation:	number is EH-500.
Environmental Conditions:	Samples were collected from July 2002 through October 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton	

LOE ID:	27072
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 to October 2007 with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton	

LOE ID:	27073
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected with 2 samples correlated with a storm event. None of the 2 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID:	27074
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected with 25 monthly geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID:	27075
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 50 single samples were collected and 15 geomeans calculated. None of the 15 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID:	27076
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected with 25 monthly geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID:	30712
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through

Data Reference:	October 2007. A total of 50 single samples were collected of which 49 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton**

Region 9

LOE ID:	30817
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	84
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 86 single samples were collected of which 84 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID: 74779

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 4
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton was collected at 1 monitoring site [Camp del Mar]

Temporal Representation: Data was collected over the time period 4/18/2008-2/25/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID: 30579

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	84
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 to October 2007 with a total of 86 samples of which 84 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID:	31346
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 87 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Zero of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria
Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

Region 9

LOE ID: 27071

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 50 single samples were collected with one sample correlated with a storm event. The sample did not exceed the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44483, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton

LOE ID:	31309
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 87 single samples were collected with 26 monthly geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp del Mar, Camp Pendleton, California. Station identification number is EH-500.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach](#)
Water Body ID: CAC9045100020090211142411
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43019	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, three of the 76 samples collected during the AB411 period exceed the Water Quality Objective for enterococcus of a geomean of 35 /100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, three of the 76 samples collected during the AB411 period exceed the Water Quality Objective for enterococcus of a geomean of 35 /100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach	

LOE ID:	27176
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92

Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 92. Of the 92 samples, only one exceeded the single sample maximum total coliform standard.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Swami's Beach in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	27365
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 92 with two samples correlated with a storm event. None of the samples exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.

Temporal Representation:

Samples were collected from June 2004 through October 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID: 28032

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 8

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were eight beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Swami's Beach, Cardiff by the Sea, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	30558
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	91
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 92 single samples were collected of which 91 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health. Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. The station ID number is EH -410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	74585
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 50 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Swami's Beach site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	74584
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 50 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Swami Beach site.
Temporal Representation:	Samples were collected roughly once per week from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID: 27177

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 92 with 25 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA.
Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID: 27196

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 52 single samples were collected with 16 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from June 2004 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	27209
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 92 single samples were collected with one sample correlated with a storm event. The one sample did not exceed the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Swami's Beach in the City of Encinitas, Batiquitos HSA. The station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID:	27181
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from October 2004 through October 2007. A total of 52 single samples were collected with no samples correlated with a storm event.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. The station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID:	31252
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 53 single samples were collected with 17 geomeans calculated. None of the 17 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from July 2002 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	74586
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach was collected at 1 monitoring site [Swami's]

Temporal Representation: Data was collected over the time period 4/17/2008-8/24/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID: 27364

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 92
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 92 with six of the samples exceeding the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID: 74587

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 50 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Swami's Beach site.
Temporal Representation:	Samples were collected roughly once per week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID:	27178
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 92 with only one sample correlated with a storm event. The one sample did not exceed the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Swami's Beach, in the City of Encinitas, Batiquitos HSA. The station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.

Temporal Representation:

Samples were collected weekly from June 2004 through October 2007.

Environmental Conditions:

Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID: 27208

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data were collected by the County of San Diego from June 2004 through October 2007. A total of 92 single samples were collected with 25 monthly geomeans calculated. Three of the 25 geomeans exceeded the geomean water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.

Temporal Representation:

Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID: 30794

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	91
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 92 of which 91 are dry weather (AB411) samples and only one exceeded the single sample maximum total coliform standard.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Swami's Beach in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	77591
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the fifty samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria

objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected at Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach.

Temporal Representation:

The samples were collected from April 2008 through August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID: 31253

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 93 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA.
Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

LOE ID: 31251

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data were collected by the County of San Diego from July 2002 through October 2007. A total of 93 single samples were collected with 26 monthly geomeans calculated. Three of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach

Region 9

LOE ID:	27195
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 52 single samples were collected. None of samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. Station ID number is EH - 410. Lat/Long: 33.03443/ -117.29239.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

**Line of Evidence (LOE) for Decision ID 43019, Indicator Bacteria
Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach**

Region 9

LOE ID: 27197

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 92

Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 92 single samples were collected with five samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Swami's Beach, in the City of Encinitas, Batiquitos HSA. The station ID number is EH -410. Lat/Long: 33.03443/ -117.29239.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach \(Pipes area\)](#)
Water Body ID: CAC9046100020090211143204
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43701	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, zero of 158 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, zero of 158 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)	

LOE ID:	27210
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. The number of samples collected for total coliform analysis was 127. None of the 127 samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station, station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:	27215
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2007 through December 2007. The number of samples collected for total coliform analysis was 127. Of the 127 samples, 10 were correlated with a storm event. None of the samples exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.

Temporal Representation: Samples were collected weekly from January 2007 through December 2007.

Environmental Conditions: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria	Region 9
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LOE ID:	74738
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Elijo State Beach (Pipes area) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria	Region 9
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LOE ID:	74737
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	137
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area) to determine beneficial use support and results are as follows: 2 of 137 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area) was collected at 2 monitoring sites [San Elijo State Beach (EH-400), Pipes]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:	74736
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Elijo State Beach (Pipes Area) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)**

LOE ID:	74715
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Elijo State Beach (Pipes area) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)**

LOE ID:	77667
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 134 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area).
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)	

LOE ID:	30646
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected of which 117 are dry weather (AB411) samples . None of the samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)	

LOE ID:	30852
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. The number of samples collected for total coliform analysis was 127 of which 117 are dry weather (AB411) samples and none of those samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station, station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:	31202
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through October 2007. A total of 76 dry month (April through October) single samples were collected with 18 dry month geomeans calculated. None of the 18 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)	

LOE ID:	31201
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through October 2007. A total of 76 dry month (April through October) single samples were collected with 18 dry month geomeans calculated. None of the 18 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)**Region 9**

LOE ID:	31200
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through October 2007. A total of 76 dry month (April through October) single samples were collected with 18 dry month geomeans calculated. None of the 18 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)**Region 9**

LOE ID:	30745
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected of which 117 are dry weather (AB411) samples . One of sample exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:	27218
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected. None of samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID: 27216

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. The number of samples collected for total coliform analysis was 127 with 10 samples correlated with a storm event. None of the 10 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.

Temporal Representation: Samples were collected weekly from July 2005 through December 2007.

Environmental Conditions: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID: 27217

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. The number of samples collected for total coliform analysis was 127 with 24 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:	27214
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	127
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. The number of samples collected for total coliform analysis was 127. Of the 157 samples, two exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and

Objective/Criterion Reference:	not more than 10 percent of the samples shall exceed 230 per 100 ml. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)		
LOE ID:	27220	
Pollutant:	Fecal Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	24	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected with 24 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).	
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.	
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.	
Environmental Conditions:		
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.	
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006	
Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)		

LOE ID:	27219
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected with 10 samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:	27221
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected. None of the samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation:	Samples were collected weekly from July 2005 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:	28241
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	110
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 110 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the

Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Beach advisories were from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID:

27222

Pollutant:

Enterococcus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

10

Number of Exceedances:

0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected with 10 samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective.

Data Reference:

[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.

Temporal Representation:

Samples were collected weekly from July 2005 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43701, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Pipes area)

LOE ID: 27224

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data were collected by the County of San Diego from July 2005 through December 2007. A total of 127 single samples were collected with 24 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo State Beach Station (Pipes area), station id EH-400, in the San Elijo HSA. Lat/Long: 33.02597/ -117.28759.
Temporal Representation: Samples were collected weekly from July 2005 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach \(Main Entrance\)](#)
Water Body ID: CAC9046100020090211151057
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44346	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, zero of 168 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, zero of 168 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)	

LOE ID:	77666
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	133

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 133 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance).
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)	

LOE ID:	74711
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 133 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Elijo State Beach (Main Entrance) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID:	74712
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 133 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Elijo State Beach (Main Entrance) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)**

LOE ID:	74713
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	136
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance) to determine beneficial use support and results are as follows: 1 of 136 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance) was collected at 2 monitoring sites [stairs near main entrance, San Elijo State Park SE-070]

Temporal Representation: Data was collected over the time period 1/2/2008-8/23/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID: 74714

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 133

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 133 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the San Elijo State Beach (Main Entrance) site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID: 31319

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 2004 through

	October 2007. A total of 108 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID:	31320
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 108 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.

Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)	

LOE ID:	31321
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 108 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)	

LOE ID:	30744
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	170
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected of which 170 are dry weather (AB411) samples with three of the samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID:	30851
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	170
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188 of which 170 are dry weather (AB411) samples and none of those samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)		
LOE ID:	30645	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	170	
Number of Exceedances:	1	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected of which 170 are dry weather (AB411) samples with one of the samples exceeding the single sample water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).	
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency	
Evaluation Guideline: Guideline Reference:		
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.	
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.	
Environmental Conditions:		
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.	
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006	
Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria		Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID:	27263
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	188
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188. Of the 188 samples, nine exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)**

LOE ID:	27264
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188. None of the 188 samples exceeded the single sample maximum total coliform standard.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)	

LOE ID:	27358
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected with four of the samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID: 27360

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 35
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data were collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected with 35 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID: 27359

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 18

Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected with 18 samples correlated with a storm event. Three of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID:	27291
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected with 35 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID: 27265

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 18

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188. Eighteen of the 188 samples correlated with a storm event. None of the 18 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID:	27267
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected with six of the samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)**

LOE ID:	28240
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Beach advisories were posted at San Elijo State Beach main entrance in Cardiff-by-the-Sea, CA.

Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID: 27249

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 18
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188. Of the 188 samples, 18 were correlated with a storm event. Of the 18 storm samples only eight exceeded the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID:	27280
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 188 single samples were collected with 8 samples correlated with a storm event. Three of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44346, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach (Main Entrance)

LOE ID: 27266

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 34
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188 with 34 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Elijo State Beach (Main Entrance), station id SE-070, in the San Elijo HSA. Lat/Long: 33.02053/ -117.28487.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park](#)
Water Body ID: CAC9051100020090216230114
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44264 **Region 9**
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of 98 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of 98 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

LOE ID: 27103
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 107

Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 107 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID:	27104
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 107 single samples were collected with three samples correlated with a storm event. No sample exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park		
LOE ID:	27105	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	169	
Number of Exceedances:	5	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with 5 samples exceeding the single sample water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.	
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).	
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.	
Temporal Representation:	Samples were collected from January 2004 through December 2007.	
Environmental Conditions:		

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID: 27106

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with five samples correlated with a storm event. One of the five samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID: 27107

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with 40 monthly geomeans calculated. None of the 40 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID:	27108
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 107 single samples were collected and 26 geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park	

LOE ID:	27109
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with 40 monthly geomeans calculated. One of the 40 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park**Region 9**

LOE ID:	28208
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2001 to December 2007, there were two beach advisory days for this location. Bacteriological samples are collected on a weekly basis from April through October. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	County of Orange, March 2007, Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>California Code of Regulations. Title 17, Section 7960.</p> <p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.</p>
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at the shoreline near Powerhouse Park in Del Mar, CA.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park**Region 9**

LOE ID:	30722
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	104
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 107 single samples were collected of which 104 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID:	30827
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	164
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected of which 164 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park	

LOE ID:	31239
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 107 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park	

LOE ID:	31240
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 65 dry month (April through October) single samples were collected with 16 dry month geomeans calculated. None of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park	

LOE ID:	31241
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 25 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

LOE ID:	75023
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 58 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Powerhouse Park, Del Mar site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

LOE ID: 75046

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 58
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 58 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Powerhouse Park, Del Mar site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

LOE ID: 75047

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 78
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park to determine beneficial use support and results are as follows: 1 of 78 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park was collected at 1 monitoring site [15th St. near outlet]
Temporal Representation:	Data was collected over the time period 1/15/2008-8/31/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park	

LOE ID:	75048
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 58 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Powerhouse Park, Del Mar site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park	

LOE ID:	27102
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with five samples correlated with a storm event. None of the five samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID:	27100
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	169

Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

LOE ID:	27099
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with five samples correlated with a storm event. Two of the five samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID:	77652
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 57 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID: 30612

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 164
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected of which 164 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 15th St. Del Mar City Beach, Del Mar, California. Station identification number is EH-360.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44264, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

Region 9

LOE ID: 27098

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	169
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 169 single samples were collected with 11 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 15th St. Del Mar, Del Mar City Beach, California. Station identification number is EH-360.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

DECISION ID	49917	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 5/10/08, 5/9/09, and 5/8/10 for this water body. The total weight of trash (lbs) collected on these dates was 484.5. Using the metric, Coastkeeper classified this water body as low for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.

3. This process is scientifically defensible and reproducible.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49917, Trash

Region 9

Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park

LOE ID:	75049
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 5/10/08, 5/9/09, and 5/8/10 for this water body. The total weight of trash (lbs) collected on these dates was 484.5. However, using the metric, Coastkeeper classified this water body as low for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	15th Street/Powerhouse - Del Mar
Temporal Representation:	Three cleanups occurred on 5/10/08, 5/9/09, and 5/8/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(Batiquitos Lagoon Outlet\)](#)
Water Body ID: CAC9045100020090217093153
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43230	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of the 84 samples collected during the AB411 period exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of the 84 samples collected during the AB411 period exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID:	31250
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 111 single samples were collected with 26 monthly geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	31249
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 69 dry month (April through October) single samples were collected with 18 dry month geomeans calculated. One of the 18 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at South Carlsbad State Beach (Batiqitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440. Samples were collected from July 2002 through October 2007.

Temporal Representation:

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiqitos HSA, at South Carlsbad State Beach (Batiqitos Lagoon Outlet)

LOE ID: 74563

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 72
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Pacific Ocean Shoreline, Batiqitos HSA, at South Carlsbad State Beach (Batiqitos Lagoon Outlet) to determine beneficial use support and results are as follows: 2 of 72 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pacific Ocean Shoreline, Batiqitos HSA, at South Carlsbad State Beach (Batiqitos Lagoon Outlet) was collected at 1 monitoring site [Batiqitos Lagoon outlet]

Temporal Representation:

Data was collected over the time period April 2008 through August 2010.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiqitos HSA, at South Carlsbad State Beach (Batiqitos Lagoon Outlet)

LOE ID: 74564

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 57 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Batiquitos Lagoon outlet site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	27180
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 147 single samples were collected with 13 samples correlated with a storm event. Seven of the 13 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from October 2004 through May 2006.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID: 27097

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 147

Number of Exceedances: 10

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 145 single samples were collected with 10 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID:	28030
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there was one beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Batiquitos Lagoon Outlet at South Carlsbad State Beach, Carlsbad, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	74561
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 58 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Batiquitos Lagoon outlet site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID:	27154
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 147 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID: 27175

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 30

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 105 single samples were collected and 30 geomeans calculated. None of the 30 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml

Objective/Criterion Reference: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID: 27174

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 147 single samples were collected with 38 monthly geomeans calculated. None of the 38 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	27173
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 148 single samples were collected with 13 samples correlated with a storm event. Five of the 13 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID:	27171
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	148
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 148 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID: 27179

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 39

Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 148 single samples were collected with 39 monthly geomeans calculated. Three of the 39 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID: 27169

Pollutant: Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 105 single samples were collected with 11 samples correlating with a storm event. Two of the 11 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	27163
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	105
Number of Exceedances:	3

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 105 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	27161
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 147 single samples were collected with 13 samples correlated with a storm event. Two of the 13 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID: 77587

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 57

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: None of the fifty-six samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet).

Temporal Representation: The samples were collected from April 2008 through August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	74562
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 58 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Batiquitos Lagoon outlet site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	31248
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 111 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. One of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

Objective/Criterion Reference: 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)	

LOE ID: 30557

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 135

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 148 single samples were collected of which 135 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)

LOE ID:	30793
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 147 single samples were collected of which 134 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (Batiquitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43230, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Batiquitos Lagoon Outlet)**

LOE ID:	30679
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	94
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through

Data Reference:	October 2007. A total of 105 single samples were collected of which 94 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (Batiqitos Lagoon Outlet), San Diego, California. Department of Environmental Health identification number is EH-440.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach \(near Cerezo Drive\)](#)
Water Body ID: CAC9043100020090217093857
Water Body Type: Coastal & Bay Shoreline

DECISION ID 42724 **Region 9**
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, one of the 173 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, one of the 173 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 77630
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 129

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 129 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive).
Temporal Representation:	The samples were collected from April 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)	

LOE ID:	74746
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	129
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 129 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Cerezo Drive site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID:	74745
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	135
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive) to determine beneficial use support and results are as follows: 0 of 135 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive) was collected at 1 monitoring site [Cerezo Drive]
Temporal Representation:	Data was collected over the time period 1/22/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)**

LOE ID:	74744
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	129
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 129 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Cerezo Drive site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 31310

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 74743

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	129
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 129 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Cerezo Drive site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID:	31311
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 104 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 31312

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 104 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 30696

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 168
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 168 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID:	30811
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	168
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 168 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)	

LOE ID:	28056
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Cerezo Drive on Oceanside City Beach, Oceanside, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 27204

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected and 44 geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 27201

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004

	through December 2007. A total of 185 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID:	27202
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 27207

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 44 monthly geomeans calculated. One of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 30574

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 167
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected of which 167 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID:	27205
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	184
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)	

LOE ID:	27206
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 17 samples correlated with a storm event. Two of the 17 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID:	27199
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	185
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with two samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Station identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)**

LOE ID:	27200
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 17 samples correlated with a storm event. Two of the 17 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Carlsbad State Beach (near Cereza Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID:	27193
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 27198

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 17

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 17 samples correlated with a storm event. None of the 17 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Station identification number is EN-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42724, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Cerezo Drive)

LOE ID: 27203

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 17 samples correlating with a storm event. None of the 17 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at South Carlsbad State Beach (near Cerezo Drive), Carlsbad, California. Department of Environmental Health identification number is EN-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet](#)
Water Body ID: CAC9014000020090218165222
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44426 **Region 9**
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 27 of 141 samples exceed the water quality objective of single sample maximum for total coliform for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [With the latest data, 27 of 141 samples exceed the water quality objective of single sample maximum for total coliform for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID: 27187
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with four sample correlated with a storm event. One sample exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID:	31186
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 94 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	

LOE ID:	27185
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with five sample correlated with a storm event. None exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	

Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	

LOE ID:	30750
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected of which 63 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	

LOE ID:	27184
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID:	27182
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	117
Number of Exceedances:	27
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with 27 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	

LOE ID:	75087
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 16 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Mateo Creek outlet site.
Temporal Representation:	Samples were collected from April 2008 to December 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	

LOE ID:	77673
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 16 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet.
Temporal Representation:	The samples were collected from April 2008 to December 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID:	31185
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 57 dry month (April through October) single samples were collected with 17 dry month geomeans calculated. None of the 17 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB,

Objective/Criterion Reference: 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	

LOE ID: 31184

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 94 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. One of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

Region 9

LOE ID:	27189
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with five samples correlated with a storm event. Three samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

Region 9

LOE ID:	27183
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with five sample correlated with a storm event. Four of the five sample exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID:	27192
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with 31 monthly geomeans calculated. Three of the 31 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	

LOE ID:	27191
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected and 21 geomeans calculated. None of the 21 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet**Region 9**

LOE ID:	27190
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with 31 monthly geomeans calculated. Two of the 31 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet**Region 9**

LOE ID:	30651
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	7

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected of which 112 are dry weather (AB411) samples with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

Region 9

LOE ID:	75090
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 16 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Mateo Creek outlet site.
Temporal Representation:	Samples were collected from April 2008 to December 2009.
Environmental Conditions:	

QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

Region 9

LOE ID: 30857

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 112
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected of which 112 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

Region 9

LOE ID: 75089

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet was collected at 1 monitoring site [Trestles San Mateo Crk]
Temporal Representation:	Data was collected over the time period 4/3/2008-12/23/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID:	75088
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 16 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Mateo Creek outlet site.
Temporal Representation:	Samples were collected from April 2008 to December 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID:	28294
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	109
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2001 to December 2007, there were 109 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
Objective/Criterion Reference:	<p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.</p> California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Beach advisories were from the San Mateo Creek Outlet station id EH-520. Lat/Long: 33.38595/ -117.59519.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet**

LOE ID:	27188
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 117 single samples were collected with 10 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44426, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet

LOE ID:	27186
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	67
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 67 single samples were collected with two sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at San Mateo Creek Outlet, San Diego, California. Station identification number is EH-520.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach](#)
Water Body ID: CAC9042100020090224115105
Water Body Type: Coastal & Bay Shoreline

DECISION ID	36340	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 12 of the 174 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 12 of the 174 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach	

LOE ID:	27236
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	185

Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 13 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID:	27242
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with six samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID: 27241

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 17

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 17 samples correlated with a storm event. Two of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID: 27240

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 185
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with two samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID: 27239

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 17 samples correlated with a storm event. One of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID:	27238
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with one sample

Data Reference:	<p>exceeding the single sample water quality objective.</p> <p>National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station</p> <p>Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Total coliform density shall not exceed 1,000 per 100ml;</p> <p>Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID:	27237
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	17
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 17 samples correlated with a storm event. Ten of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p>
Data Reference:	<p>National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station</p> <p>Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID: 30570

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 168
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 168 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID: 28053

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were four beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Bacteriological monitoring samples were collected at Saint Malo Beach, Oceanside, CA.
Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:
QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID:	27245
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected and 44 geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach	

LOE ID:	27244
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID:	27243
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 17 samples correlated with a storm event. Six of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

**Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach**

Region 9

LOE ID:

31289

Pollutant:

Total Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

26

Number of Exceedances:

0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 103 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. One of the 26 geomeans exceeded the geomean water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation:

Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID:	30806
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	168
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 168 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID:	30692
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	168

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 168 are dry weather (AB411) samples with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID:	31288
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 103 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

Region 9

LOE ID: 31287

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 103 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Two of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID:	74855
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	130
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 130 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the St. Malo Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach**

LOE ID:	74854
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	44
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach to determine beneficial use support and results are as follows: 5 of 44 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach was collected at 1 monitoring site [St. Malo Beach]

Temporal Representation: Data was collected over the time period 1/23/2008-8/16/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID: 74853

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 130

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 130 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the St Malo Beach site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID: 74852

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 130

Number of Exceedances: 9

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Nine of the 130 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the St Malo Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach	

LOE ID:	27246
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 44 monthly geomeans calculated. Three of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at St. Malo Beach, Oceanside, California. Station identification number is OC-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 36340, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach

LOE ID:	77622
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	130
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eleven of the 130 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street](#)
Water Body ID: CAC9041000020090224105128
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44564	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 13 of the 173 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 13 of the 173 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	27292
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	184

Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with nine samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	30572
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	168
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 168 single samples associated with dry weather were collected with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

LOE ID: 27295

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16

Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 16 samples correlated with a storm event. Three of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

Region 9

LOE ID: 27296

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 184
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with four samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

Region 9

LOE ID: 27297

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 16 samples correlated with a storm event. Five of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

LOE ID:	27298
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	184
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with five samples

Data Reference:	<p>exceeding the single sample water quality objective.</p> Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Enterococcus density shall not exceed 35 per 100 ml.</p> <p>Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

LOE ID:	28055
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2001 to December 2007, there were two beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>California Code of Regulations. Title 17, Section 7960.</p> <p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the</p>

Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Bacteriological monitoring samples were collected at Forster and Wisconsin Street on Oceanside City Beach, Oceanside, CA.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

LOE ID: 27294

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 184
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with four samples exceeding the single sample water quality objective.
Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance](#)

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

Region 9

LOE ID:	27293
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	16
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 16 samples correlated with a storm event. Six of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

Region 9

LOE ID: 27302

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 44 monthly geomeans calculated. Three of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

LOE ID:	27301
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected and 44 geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	27300
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

Region 9

LOE ID: 31295

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

Region 9

LOE ID: 31293

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street

Region 9

LOE ID:	30809
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	168
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected of which 168 are dry weather (AB411) samples with one samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	74693
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	129
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 129 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Forester Street site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	74692
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	132
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Streets to determine beneficial use support and results are as follows: 6 of 132 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Streets was collected at 1 monitoring site [Forester Street]
Temporal Representation:	Data was collected over the time period 1/9/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	27299
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 16 samples correlated with a storm event. Five of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	74690
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	129
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 129 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Forester Street site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	31294
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Forester Street, Oceanside, California. Station identification number is OC-040.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	77627
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	129
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Two of the 129 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44564, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street	

LOE ID:	74691
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	129
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 129 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Forester Street site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty](#)
Water Body ID: CAC9101000020091104133208
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49884	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Evaluation Guideline for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49884, Arsenic	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID: 74840
Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet
Beneficial Use: Shellfish Harvesting

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49885	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One

samples exceed the Evaluation Guideline for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49885, Cadmium

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	74841
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1:

Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49886	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49886, Chlordane	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	74842
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49888	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49888, Chlorpyrifos

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	74867
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)
[Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 12/10/2007

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at:
<http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49889	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant: Dieldrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dieldrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49889, Dieldrin	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	74868
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49891	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endosulfan.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endosulfan and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49891, Endosulfan

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 74869

Pollutant: Endosulfan

LOE Subgroup: Pollutant-Tissue

Matrix: Tissue

Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: Shellfish surveys

Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49892	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	74891
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pollutant: Heptachlor epoxide
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Heptachlor epoxide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Heptachlor epoxide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49898, Heptachlor epoxide

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 74892

Pollutant: Heptachlor epoxide
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s)

Objective/Criterion Reference:	that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49899	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hexachlorobenzene/ HCB.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for and Hexachlorobenzene/ HCB this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49899, Hexachlorobenzene/ HCB

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	74893
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at:

QAPP Information Reference(s):

DECISION ID	49900	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49900, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID: 74915

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49901	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Mercury.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49901, Mercury

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	74916
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

QAPP Information Reference(s):

DECISION ID	49902	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mirex.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mirex and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49902, Mirex	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	74917
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The detected not quantifiable result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL

Data Reference:	were calculated by multiplying 3.18 by the MDL. State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49903	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for .</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 49903, PAHs (Polycyclic Aromatic Hydrocarbons)
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty**

Region 9

LOE ID:	74938
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite

Temporal Representation:	sample was collected from Imperial Beach North Jetty, site IBNJ. Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49905	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for PCBs (Polychlorinated biphenyls).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exceeded the Evaluation Guideline for PCBs (Polychlorinated biphenyls) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49905, PCBs (Polychlorinated biphenyls)	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	74939
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49906	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Selenium.
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Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49906, Selenium

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	74940
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite

Temporal Representation:	sample was collected from Imperial Beach North Jetty, site IBNJ. Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49907	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49907, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	74960
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Imperial Beach North Jetty, site IBNJ.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/10/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	42675	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>No new data of indicator bacteria were available for this water body, and so decision has been carried over from 2012.</p> <p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Ten lines of evidence are available in the administrative record to assess this pollutant. Fifty-one of the samples exceed the water quality objective for Shellfish Harvesting.</p> <p>The coastal beach at this water segment is identified as an AB411 beach. To comply with the requirements of AB411 the dry weather data collected during the time frame of April 1st to October 31st is assessed using a four percent exceedance percentage, as described in section 3.3 (and 4.3) of the Listing Policy. An assessment for dry weather single sample and the geometric mean calculation was conducted and three additional lines of evidence are available in the administrative record. Six of 173 and zero of 97 single samples exceeded the criteria for recreational use at station IB060 and EH041, respectively, and zero of 25 geometric mean calculations from station IB060 exceeded the criteria for recreational use and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-one of 295 samples exceed the Shellfish Harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Six of 173 dry weather single samples exceeded the total coliform criteria for recreational use and this does not exceed the allowable limit (at a four percent exceedance percentage - AB411) in section 3.3 of the Listing Policy. 5. Zero of 97 dry weather single samples exceeded the total coliform criteria for recreational use and this does not exceed the allowable limit (at a four percent exceedance percentage - AB411) in section 3.3 of the Listing Policy. 6. Zero of 25 dry weather geometric mean calculations exceeded the total coliform criteria for recreational use and this does not exceed the allowable limit (at a four percent exceedance percentage - AB411) in section 3.3 of the Listing Policy. 7. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>No new data of indicator bacteria were available for this water body, decision was carried over from 2012.</p> <p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	27815
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 56 single samples were collected and 16 geomeans calculated. One of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27804
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 99 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 30607

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 98

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 100 single samples were collected of which 98 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, San Diego, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	31297
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 110 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IBI-060.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	31299
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 110 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation: Environmental Conditions:	Samples were collected from June 2004 through October 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27796
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	21
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from JFebruary 2004 through December 2007. A total of 196 single samples were collected with 21 samples correlating with a storm event. Fourteen of the 21 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach

monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27797

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 196 single samples were collected with 44 monthly geomeans calculated. Two of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27798

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	196
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 196 single samples were collected with 19 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27801
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	197
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 197 single samples were collected with 22 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27803

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 197 single samples were collected with 44 monthly geomeans calculated. Four of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IBI-060.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27799

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 196 single samples were collected with 22 samples correlating with a storm event. Ten of the 22 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IBI-060.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27806
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	99
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through

October 2007. A total of 99 single samples were collected with 15 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 28015

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 56 single samples were collected with one sample correlated with a storm event. The one sample did not exceed the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event

was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 28198

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 11 beach advisory days for these locations. Bacteriological samples are collected on a weekly basis from April through October. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [County of Orange, March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Bacteriological monitoring samples were collected at Carnation Avenue and Camp Surf Jetty in Imperial Beach.

Temporal Representation: The beach advisory covers the time frame of January 2001 -December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27807

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 99 single samples were collected with two samples correlating with a storm event. Neither sample exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27808
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 99 single samples were collected with one sample correlating with a storm event. One of the two samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty**

LOE ID:	27811
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 56 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27793
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	196
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 196 single samples were collected with 14 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27800

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 196 single samples were collected and 44 geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27795

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 196 single samples were collected with 21 samples correlating with a storm event. Eight of the 21 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, San Diego, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27802
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 196 single samples were collected with 22 samples

	correlating with a storm event. Eleven of the 22 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27809
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 99 single samples were collected with 25 monthly geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 28018

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 56 single samples were collected with and 25 geomeans calculated. None of the geomeans exceeded the water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27794

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	196
Number of Exceedances:	36
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 196 single samples were collected with 36 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	27823
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 100 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, San Diego, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID: 27825

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 100 single samples were collected with two samples correlating with a storm event. None of the two samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from May 2006 through April 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

Region 9

LOE ID: 30716

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 55
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 56 single samples were collected of which 55 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

Region 9

LOE ID: 30717

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 174
Number of Exceedances: 9

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 196 single samples were collected of which 174 are dry weather (AB411) samples with nine samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	30606
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	175
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 197 single samples were collected of which 175 are dry weather (AB411) samples with 11 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	30821
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	173
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 196 single samples were collected of which 173 are dry weather (AB411) samples with six of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	30822
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 99 single samples were collected of which 97 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty

LOE ID:	31296
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 100 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Camp Surf Jetty, Imperial Beach, California. Department of Environmental Health identification number is EH-041.
Temporal Representation: Environmental Conditions:	Samples were collected from June 2004 through October 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42675, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	

LOE ID:	31298
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 109 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective. .
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Carnation Ave, Imperial Beach, California. Department of Environmental Health identification number is IB-060.
Temporal Representation: Environmental Conditions:	Samples were collected from June 2004 through October 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Point Loma HA, at Lighthouse](#)
Water Body ID: CAC9081000020091104102456
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44225 **Region 9**
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 1 of 233 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 1 of 233 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

LOE ID: 77649
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 138

Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Two of the 138 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Point Loma HA, at Lighthouse.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

LOE ID:	27660
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with 21 samples correlated with a storm event. One of the 21 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 74992

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 149
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Point Loma HA, at Lighthouse to determine beneficial use support and results are as follows: 0 of 149 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Point Loma HA, at Lighthouse was collected at 1 monitoring site [Lighthouse]

Temporal Representation: Data was collected over the time period 1/5/2008-8/24/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID:	74991
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 138 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Lighthouse site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID:	74990
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 137 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Lighthouse site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 27658

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 351
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with four samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 27657

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 21
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with 21 samples correlated with a storm event. None of the 21 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID:	31272
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 222 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

LOE ID:	27656
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	351
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 27655

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 21
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with 21 samples correlated with a storm event. None of the 21 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 27654

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	351
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID:	31275
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 222 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID:	31274
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 222 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 27653

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 21
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with 21 samples correlated with a storm event. Three of the 21 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information Reference(s): Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 30610

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	330
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected of which 330 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID:	27652
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	351
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with 9 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 30825

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 330

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected of which 330 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 30720

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 330
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected of which 330 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 27663

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 96
Number of Exceedances: 1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with 96 monthly geomeans calculated. One of the 96 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse**

Region 9

LOE ID:	27662
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected and 96 geomeans calculated. None of the 96 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 27661

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 96

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 351 single samples were collected with 96 monthly geomeans calculated. None of the 96 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44225, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Lighthouse

Region 9

LOE ID: 74993

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 138 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Lighthouse site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant](#)
Water Body ID: CAC9081000020091104103305
Water Body Type: Coastal & Bay Shoreline

DECISION ID 43016 **Region 9**
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 2 of 228 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 2 of 228 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID: 74994
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 132

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 132 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Point Loma Treatment Plant site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	75017
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	132
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 132 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Point Loma Treatment Plant site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	75016
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	143
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant to determine beneficial use support and results are as follows: 6 of 143 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant was collected at 1 monitoring site [Point Loma Treatment Plant]
Temporal Representation:	Data was collected over the time period 1/5/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID:	31271
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 223 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.

Temporal Representation: Samples were collected from July 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID: 31270

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 57

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 223 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.

Temporal Representation: Samples were collected from July 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID: 31269

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 223 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. One of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	30721
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	334
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected of which 334 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID:	30826
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	334
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected of which 334 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.

Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	27680
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with 96 monthly geomeans calculated. Two of the 96 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	30611
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	334
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected of which 334 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

Region 9

LOE ID:	27679
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected and 96 geomeans calculated. None of the 96 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB,

Objective/Criterion Reference: 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID: 27678

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 96

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with 96 monthly geomeans calculated. None of the 96 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	27676
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with 23 samples correlated with a storm event. One of the 23 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID:	27675
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	357
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID:	27674
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with 23 samples correlated with a storm event. One of the 23 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	27673
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	357
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	

Spatial Representation:	Samples were collected at Lighthouse, San Diego, California. Station identification number is PL-040.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant	

LOE ID:	27672
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with 23 samples correlating with a storm event. None of the 23 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID:	27671
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	357
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant**

LOE ID:	27670
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through

	December 2007. A total of 357 single samples were collected with 23 samples correlated with a storm event. Three of the 23 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID:	27669
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	357
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 357 single samples were collected with 13 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Point Loma Treatment Plant, San Diego, California. Station identification number is PL-050.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID: 74995

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 132
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 132 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Point Loma Treatment Plant site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43016, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant

LOE ID: 77650

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	132
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Sixteen of the 132 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Point Loma HA, at Ladera Street](#)
Water Body ID: CAC9081000020091104110439
Water Body Type: Coastal & Bay Shoreline

DECISION ID	42335	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 2 of 238 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 2 of 238 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street	

LOE ID:	77648
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	146

Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Six of the 146 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Point Loma HA, at Ladera Street.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

LOE ID:	27684
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	340
Number of Exceedances:	20
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 340 single samples were collected with 20 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID: 27685

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 23
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 340 single samples were collected with 23 samples correlated with a storm event. One of the 23 samples exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

LOE ID:	28205
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2001 to December 2007, there were five beach advisory days for this location. Bacteriological samples are collected on a weekly basis from April through October. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>California Code of Regulations. Title 17, Section 7960.</p> <p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.</p>
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at the shoreline near Ladera Street in San Diego, CA.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Point Loma HA, at Ladera Street**

LOE ID:	27691
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 342 single samples were collected with 23 samples correlated with a storm event. None of the 23 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	27692
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 340 single samples were collected with 92 monthly geomeans calculated. One of the 92 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	27693
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 341 single samples were collected and 92 geomeans calculated. None of the 92 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	27686
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	340
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 340 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	27694
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Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 342 single samples were collected with 92 monthly geomeans calculated. Two of the 92 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	27687
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 340 single samples were collected with 23 samples correlated with a storm event. None of the 23 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street**

Region 9

LOE ID:	27688
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	341
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 341 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB,

Objective/Criterion Reference: 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street	

LOE ID:	27689
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 341 single samples were collected with 22 samples correlated with a storm event. None of the 22 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach

monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

LOE ID: 27690

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 342
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 342 single samples were collected with six samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.

Temporal Representation: Samples were collected from July 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

LOE ID: 30719

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	319
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 341 single samples were collected of which 319 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	30824
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	317
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 340 single samples were collected of which 317 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	30609
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	319
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 342 single samples were collected of which 319 are dry weather (AB411) samples with six samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID: 31278

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 53
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 207 dry month (April through October) single samples were collected with 53 dry month geomeans calculated. One of the 53 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.

Temporal Representation: Samples were collected from July 1999 through October 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID: 31279

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 53

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 207 dry month (April through October) single samples were collected with 53 dry month geomeans calculated. None of the 53 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.
Temporal Representation:	Samples were collected from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID:	31282
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 205 dry month (April through October) single samples were collected with 53 dry month geomeans calculated. None of the 53 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ladera Street, San Diego, California. Station identification number is PL-070.

Temporal Representation: Samples were collected from July 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID: 74966

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 146

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 146 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Ladera Street site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

Region 9

LOE ID: 74987

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 146 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ladera Street site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

LOE ID:	74988
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	154
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Point Loma HA, at Ladera Street to determine beneficial use support and results are as follows: 2 of 154 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Point Loma HA, at Ladera Street was collected at 1 monitoring site [Ladera Street]
Temporal Representation:	Data was collected over the time period 1/5/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42335, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Ladera Street

LOE ID:	74989
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 146 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ladera Street site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave](#)
Water Body ID: CAC9081000020091104104343
Water Body Type: Coastal & Bay Shoreline

DECISION ID	32922	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 56 of the 129 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 56 of the 129 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave	

LOE ID:	27695
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	385
Number of Exceedances:	70
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 385 single samples were collected with 70 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	31286
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 234 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.

Temporal Representation: Samples were collected from July 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID: 27697

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 385

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 385 single samples were collected with one sample exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

LOE ID:	27698
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 385 single samples were collected with 25 samples correlated with a storm event. None of the 25 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave**

LOE ID:	27699
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	382
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 382 single samples were collected with 15 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	27700
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 382 single samples were collected with 25 samples correlated with a storm event. Two of the 25 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	27701
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	386
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 386 single samples were collected with 19 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

LOE ID:	27702
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 386 single samples were collected with 25 samples correlated with a storm event. Six of the 25 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave**

LOE ID:	27703
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 385 single samples were collected with 97 monthly geomeans calculated. One of the 97 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	27704
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 382 single samples were collected and 97 geomeans calculated. None of the 97 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	27705
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 386 single samples were collected with 97 monthly geomeans calculated. Five of the 97 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	30823
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	360
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 385 single samples were collected of which 360 are dry weather (AB411) samples with one of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	28201
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555

Number of Exceedances:	37
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 37 beach advisory days for these locations. Bacteriological samples are collected on a weekly basis from April through October. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards. County of Orange, March 2007, Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Ocean Beach near Bermuda Avenue.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave		
LOE ID:	31284	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	57	
Number of Exceedances:	2	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 235 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. Two of the 57 geomeans exceeded the geomean water quality objective.	

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

LOE ID:	30718
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	347
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 382 single samples were collected of which 347 are dry weather (AB411) samples with 13 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification

Temporal Representation:	number is PL-080.
Environmental Conditions:	Samples were collected from January 1999 through December 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave	

LOE ID:	30608
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	361
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 386 single samples were collected of which 361 are dry weather (AB411) samples with 14 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave	

LOE ID:	77647
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	129
Number of Exceedances:	56
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Fifty-six of the 129 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	74962
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	26
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-six of the 133 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bermuda Ave site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave
Region 9

LOE ID:	74963
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 133 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bermuda Ave site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave
Region 9

LOE ID:	74964
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	137
Number of Exceedances:	25
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave to determine beneficial use support and results are as follows: 25 of 137 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100

Objective/Criterion Reference: mL.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave was collected at 1 monitoring site [Bermuda Ave]

Temporal Representation: Data was collected over the time period 1/5/2008-8/24/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave	

LOE ID: 74965

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 129
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 129 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Bermuda Ave site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave	

LOE ID: 31285

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 57
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 234 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 32922, Indicator Bacteria
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave

Region 9

LOE ID:	27696
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	25
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 385 single samples were collected with 25 samples correlated with a storm event. Ten of the 23 samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm

Objective/Criterion Reference:	<p>event was defined as 0.2 inches of rainfall within a 72 hour period.</p> <p>Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency</p>
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bermuda Ave., San Diego, California. Station identification number is PL-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	<p>Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.</p> <p>Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.</p>
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset](#)
Water Body ID: CAC9081000020091104112854
Water Body Type: Coastal & Bay Shoreline

DECISION ID 42291 **Region 9**
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, seven of the 232 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, seven of the 232 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID: 31301
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 57

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 226 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID:	77646
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	144
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Six of the 144 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	74814
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	144
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 144 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ocean Beach pier at Narrangaset site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	74813
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	179
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset to determine beneficial use support and results are as follows: 7 of 179 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset was collected at 1 monitoring site [O.B. pier @ Narrangaset]

Temporal Representation: Data was collected over the time period 1/5/2008-8/24/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID: 31300

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 57

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 227 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090.
Lat/ Long: 32.746700/ -117.254000

Temporal Representation: Samples were collected weekly from July 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance](#)

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset**

LOE ID:	30820
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	363
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. The number of samples collected for total coliform analysis was 388 of which 363 are dry weather (AB411) samples and none of those samples exceeded the single sample maximum total coliform objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset**

LOE ID:	74811
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 145 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ocean Beach pier at Narrangaset site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID:	27616
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	25
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. The number of samples collected for total coliform analysis was 388. Twenty-five of the samples were correlated with a storm event. Six of the storm samples exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.

Environmental Conditions:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	27664
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	388
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected. None of the samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	27681
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected with 25 samples correlated with a storm event. Two of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	27659
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. The number of samples collected for total coliform analysis was 388 with 25 samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID:	27629
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from July 1999 through December 2007. The number of samples collected for total coliform analysis was 388 with 86 monthly geomeans calculated. Only one of the geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000

Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	27626
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	388
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. The number of samples collected for total coliform analysis was 388. None of the samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	30604
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	363
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected of which 363 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID:	27677
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	388
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.

Temporal Representation: Samples were collected weekly from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID: 27596

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 388

Number of Exceedances: 18

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. The number of samples collected for total coliform analysis was 388 with 18 samples exceeding the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000

Temporal Representation: Samples were collected weekly from July 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID: 27668

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data were collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected with 87 monthly geomeans calculated. Seven of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID:	27666
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected with 87 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	27665
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected with 25 samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000

Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	30715
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	353
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through December 2007. A total of 388 single samples were collected of which 353 are dry weather (AB411) samples None of the dry weather samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	31302
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 1999 through October 2007. A total of 227 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, Ocean Beach, at Ocean Beach Pier, at Narrangaset Avenue, Station id PL-090. Lat/ Long: 32.746700/ -117.254000
Temporal Representation:	Samples were collected weekly from July 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	

LOE ID:	74812
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 145 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at the Ocean Beach pier at Narrangaset site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

DECISION ID 49883 **Region 9**

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

Pollutant: Trash
Final Listing Decision: List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected Attainment Date: 2029
Implementation Action Other than TMDL: Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 1/24/09 and 1/23/10 for this water body. The total weight of trash (lbs) collected on these dates was 801.75. Using the metric, Coastkeeper classified this water body as high for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49883, Trash **Region 9**

Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset

LOE ID: 74815
Pollutant: Trash
LOE Subgroup: Pollutant-Nuisance
Matrix: Not Recorded
Fraction: None
Beneficial Use: Non-Contact Recreation
Number of Samples: 0
Number of Exceedances: 0

Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 1/24/09 and 1/23/10 for this water body. The total weight of trash (lbs) collected on these dates was 801.75. However, using the metric, Coastkeeper classified this water body as high for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Ocean Beach Pier.
Temporal Representation:	Two cleanups occurred on 1/24/09 and 1/23/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave](#)
Water Body ID: CAC9071100020091104113503
Water Body Type: Coastal & Bay Shoreline

DECISION ID	42310	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 30 of the 380 samples exceed the Water Quality Objective for total coliform of a SSM of 230 cfu/100 ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 30 of the 380 samples exceed the Water Quality Objective for total coliform of a SSM of 230 cfu/100 ml for the protection of SHELL beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave	

LOE ID:	28193
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	2555
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 5 beach advisory days for this location. Bacteriological samples are collected on a weekly basis from April through October. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Ocean Beach Park near Newport Avenue.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave		
LOE ID:	27722	
Pollutant:	Fecal Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	228	
Number of Exceedances:	2	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected with two of the	

samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100.
Lat/ Long: 32.749160/ -117.253000.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

LOE ID: 77645

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 145

Number of Exceedances: 14

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Fourteen of the 145 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave.

Temporal Representation: The samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave
Region 9

LOE ID:	74810
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 145 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Newport Ave, north side of pier site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave
Region 9

LOE ID:	74809
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	153
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave to determine beneficial use support and results are as follows: 9 of 153 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100

Objective/Criterion Reference: mL.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave was collected at 1 monitoring site [Newport Ave, north side of pier]

Temporal Representation: Data was collected over the time period 1/11/2008-8/6/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave	

LOE ID: 74808

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 145
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 145 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Newport Ave, north side pier site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave	

LOE ID: 31303

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 29
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through October 2007. A total of 137 dry month (April through October) single samples were collected with 29 dry month geomeans calculated. None of the 29 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from August 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave	

LOE ID:	74785
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 145 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Newport Ave, north side of pier site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave
Region 9

LOE ID:	30603
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	207
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected of which 207 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave
Region 9

LOE ID:	31305
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through October 2007. A total of 137 dry month (April through October) single samples were collected with 29 dry month geomeans calculated. None of the 29 geomeans exceeded the geomean water quality objective. .
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from August 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

Region 9

LOE ID:	31304
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through October 2007. A total of 137 dry month (April through October) single samples were collected with 29 dry month geomeans calculated. None of the 29 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100.
Lat/ Long: 32.749160/ -117.253000.

Temporal Representation: Samples were collected weekly from August 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
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LOE ID:	30819
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	206
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 227 of which 206 are dry weather (AB411) samples and none of the samples exceeded the single sample maximum total coliform objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100.
Lat/ Long: 32.749160/ -117.253000.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
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LOE ID:	30714
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	207
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected of which 207 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

Region 9

LOE ID:	27724
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected with 45 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

Region 9

LOE ID:	27723
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected with 21 samples correlated with a storm event. Only one of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

Region 9

LOE ID: 27717

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 227
Number of Exceedances: 21

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 227 with 21 samples exceeding the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100.
Lat/ Long: 32.749160/ -117.253000.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

Region 9

LOE ID: 27725

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data were collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected with 45 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

Region 9

LOE ID:	27721
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 227 with 21 samples correlated with a storm event. Only one of the storm samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100.
Lat/ Long: 32.749160/ -117.253000.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave

Region 9

LOE ID: 27718

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 21
Number of Exceedances: 10

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 227 with 21 of the samples correlated with a storm event. Ten of the storm samples exceeded the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100.
Lat/ Long: 32.749160/ -117.253000.

Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave	

LOE ID:	27719
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	227
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 227. Only one of the samples exceeded the single sample maximum total coliform standard.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave	

LOE ID:	27720
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from January 2004 through December 2007. The number of samples collected for total coliform analysis was 227 with 44 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave		
LOE ID:	27728	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	21	
Number of Exceedances:	2	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected with 21 samples correlated with a storm event. Two of the storm samples exceeded the single sample water	

Data Reference:	quality objective. National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the Mission San Diego HSA, at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100. Lat/ Long: 32.749160/ -117.253000.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42310, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave	

LOE ID:	27727
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	228
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 228 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Ocean Beach on the north side of the pier at Newport Avenue, Station id PL-100.
Lat/ Long: 32.749160/ -117.253000

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Coronado HA, at Silver Strand \(north end, Oceanside\)](#)
Water Body ID: CAC9101000020091104114820
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43950	Region 9
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, ten of the 184 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, ten of the 184 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)	

LOE ID:	74620
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140

Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 140 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Silver Strand (north end, Oceanside) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	27651
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 210 single samples were collected with 44 monthly geomeans calculated. Four of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 74622

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 143
Number of Exceedances: 11

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside) to determine beneficial use support and results are as follows: 11 of 143 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside) was collected at 1 monitoring site [Silver Strand N end (ocean)]

Temporal Representation: Data was collected over the time period 1/2/2008-8/24/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 77597

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 140
Number of Exceedances: 10

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Ten of the 140 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside).
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)	

LOE ID:	74626
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 140 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Silver Strand (north end, Oceanside) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)	

LOE ID:	31273
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 117 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Three of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	31276
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 115 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	31277
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 116 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 30686

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 176
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 206 single samples were collected of which 176 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 30800

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	176
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected of which 176 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	28052
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were nine beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at the north end of Silverstrand State Beach, Coronado, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)	

LOE ID:	30565
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	177
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 210 single samples were collected of which 177 are dry weather samples with 5 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 27641

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 209

Number of Exceedances: 26

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 26 samples exceeded the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 27642

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	33
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 33 samples correlated with a storm event. Nineteen of the 33 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	27643
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	209
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	27644
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 33 samples correlated with a storm event. Five of the 33 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)	

LOE ID:	27645
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	206
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 206 single samples were collected with 13 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)	

LOE ID:	27646
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 206 single samples were collected with 30 samples correlated with a storm event. Ten of the 30 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	27647
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	210
Number of Exceedances:	20
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 210 single samples were collected with 20 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	27648
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 206 single samples were collected with 33 samples correlated with a storm event. Fifteen of the 33 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 27649

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID: 27650

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 206 single samples were collected and 44 geomeans calculated. One of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Silver Strand (ocean side), Coronado, California. Station identification number is IB-070.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43950, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Silver Strand (north end, Oceanside)

LOE ID:	74621
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 140 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Silver Strand (north end, Oceanside) site.

Temporal Representation:

Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol](#)
Water Body ID: CAC9101000020091103224710
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44718	Region 9
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, three of the 361 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, three of the 361 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol	

LOE ID:	27633
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39

Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 496 single samples were collected with 39 samples correlated with a storm event. Five of the 39 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	27634
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	385
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 385 single samples were collected with 15 samples exceeding the single sample water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	27635
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 385 single samples were collected with 34 samples correlated with a storm event. Eleven of the 34 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

LOE ID: 27636

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 499
Number of Exceedances: 19

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 499 single samples were collected with 19 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	27637
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 499 single samples were collected with 37 samples correlated with a storm event. Fourteen of the 37 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID: 77593

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	312
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Two of the 312 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	74597
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	316
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 316 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the Avenida del Sol site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

LOE ID:	74598
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	302
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 302 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Avenida del Sol site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

LOE ID:	74599
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	318
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol to determine beneficial use support and results are as follows: 6 of 318 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol was collected at 1 monitoring site [Avd. del Sol]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	74600
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	315
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 315 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Avenida del Sol site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	31257
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 288 dry month (April through October) single samples were collected with 27 dry month geomeans calculated. One of the 27 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, San Diego, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from July 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	30561
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	462
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 499 single samples were collected of which 462 are dry weather samples with 5 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

**Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol**

Region 9

LOE ID: 30682

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 351

Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 385 single samples were collected of which 351 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol**

LOE ID:	30796
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	457
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 496 single samples were collected of which 457 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol**

LOE ID:	31258
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 212 dry month (April through October) single samples were collected with 27 dry month geomeans calculated. None of the 27 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, San Diego, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from July 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

LOE ID:	31259
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 285 dry month (April through October) single samples were collected with 27 dry month geomeans calculated. None of the 27 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.

Temporal Representation:

Samples were collected from July 2002 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

LOE ID: 28050

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 14

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

For the period from January 2001 to December 2007, there were 14 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference:

[Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at Avenida del Sol, Coronado Municipal Beach, Coronado, CA.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

LOE ID: 27638

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 45
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 496 single samples were collected with 45 monthly geomeans calculated. None of the 45 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

LOE ID: 27639

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 385 single samples were collected and 45 geomeans calculated. None of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, San Diego, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	27640
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 499 single samples were collected with 45 monthly geomeans calculated. Three of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

Objective/Criterion Reference: 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Avenida del Sol, San Diego, California. Station identification number is IB-080.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol	

LOE ID: 27630

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 496

Number of Exceedances: 32

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 496 single samples were collected with 32 samples exceeded the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol	

LOE ID:	27631
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	39
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 496 single samples were collected with 39 samples correlated with a storm event. Sixteen of the 39 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44718, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol

Region 9

LOE ID:	27632
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	496
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 496 single samples were collected with 7 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida del Sol, Coronado, California. Station identification number is IB-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach](#)
Water Body ID: CAC9101000020091103225640
Water Body Type: Coastal & Bay Shoreline

DECISION ID 43266 **Region 9**
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 13 of the 336 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 13 of the 336 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

LOE ID: 74607
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 192

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach to determine beneficial use support and results are as follows: 1 of 192 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach was collected at 1 monitoring site [Loma Ave (fmrly Isabella)]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

LOE ID:	27627
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 211 single samples were collected and 31 geomeans calculated. None of the 31 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.

Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	27625
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 45 monthly geomeans calculated. None of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (fmrly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	27624
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 22 samples correlated with a storm event. Nine of the 22 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

Region 9

LOE ID:	27623
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	336
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 13 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	30562
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	314
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected of which 314 are dry weather (AB411) samples with 4 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

Region 9

LOE ID: 28051

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were six beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data Reference: Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
[Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Bacteriological monitoring samples were collected at Loma Avenue, Coronado Municipal Beach, Coronado, CA.

Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

LOE ID:	27622
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 211 single samples were collected with 19 samples correlated with a storm event. Five of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach**

LOE ID:	27621
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	211
Number of Exceedances:	6

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 211 single samples were collected with six samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

Region 9

LOE ID:	27620
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 22 samples correlated with a storm event. Three of the 22 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml

Objective/Criterion Reference:	(SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	27619
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	336
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 3 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

LOE ID: 27618

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 22
Number of Exceedances: 12

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 22 samples correlated with a storm event. Twelve of the 22 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Loma Ave (formerly Isabella), Coronado, California. Station identification number is EH-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

LOE ID:	27617
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	336
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 18 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach**

LOE ID:	31262
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 194 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

LOE ID:	31261
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 110 dry month (April through October) single samples were collected with 17 dry month geomeans calculated. None of the 17 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.

Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	31260
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 194 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), San Diego, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	30797
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	314
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected of which 314 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

Region 9

LOE ID:	30683
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 211 single samples were collected of which 192 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), Coronado, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	74606
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 156 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loma Ave/Central Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach	

LOE ID:	74605
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	178
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 178 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loma Ave/Central Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

LOE ID:	77594
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	178
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One of the 178 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

Region 9

LOE ID:	74608
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	178
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 178 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Loma Ave/Central Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43266, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach

Region 9

LOE ID:	27628
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 336 single samples were collected with 45 monthly geomeans calculated. Two of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Loma Ave (formerly Isabella ave), San Diego, California. Station identification number is EH-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach](#)
Water Body ID: CAC9013000020090418230836
Water Body Type: Coastal & Bay Shoreline

DECISION ID 43373 **Region 9**
Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 42 of the 859 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 42 of the 859 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID: 75050
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	146
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 146 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real / N of Avenida Estacion (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	75051
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	15
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifteen of the 133 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real / N of Avenida Estacion (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID: 75052

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 146
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 146 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at N El Camino Real / N of Avenida Estacion (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID: 74674

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 133
Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality:	None of the 133 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real / N of Avenida Estacion (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	74675
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 146 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real / N of Avenida Estacion (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	74676
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 133 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real / N of Avenida Estacion (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	30968
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of

Data Reference:	April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans one exceeded the geomean water quality objective. The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	30969
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006.
Data Reference:	A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective. The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano

Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID: 30967

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID: 30613

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	537
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected of which 537 are dry weather (AB411) samples with nine samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	30828
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	537
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected of which 537 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	30313
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach**

LOE ID:	30723
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	536
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected of which 536 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach**

LOE ID:	28518
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through

December 2006. A total of 548 single samples were collected and 11 samples were correlated with storm events. From those 11 samples, 3 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparison to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same period.

Environmental Conditions:
QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID: 28526

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans, four samples exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach	

LOE ID: 28527

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 11

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with 11 samples correlated with a storm event. From the 11 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Comparison to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).

Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach	

LOE ID:	28525
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with 11 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach	

LOE ID:	28519
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	28520
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID: 28521

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 11
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected and 11 samples were correlated with a storm event. None of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Comparison to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).

Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach	

LOE ID:	28522
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach	

LOE ID:	28523
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected and 32 geomeans calculated. None of the 32 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	28524
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected with 11 samples correlated with a storm event. None of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).

Objective/Criterion Reference:	Comparison to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43373, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach

LOE ID:	28517
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	548
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with 12 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling located at Pacific Ocean Shoreline, San Clemente HA. Capistrano Shores at North Ole Hanson Beach (SCCS17), (Latitude 33.43312N Longitude 117.63442 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at Poche Beach](#)
Water Body ID: CAC9013000020090418220913
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44202	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 3.2 of the Listing Policy. Under section 3.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 221 of 296 geomean samples and 60 of 296 geomeans samples exceed the water quality objectives for enterococcus and fecal coliform, respectively, and 232 of 598 single samples exceed the WQO for total coliform for the protection of SHELL, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	

LOE ID: 30615

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	454
Number of Exceedances:	128
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected of which 454 are dry weather (AB411) samples with 128 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	30829
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	456
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected of which 456 are dry weather (AB411) samples with four exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

LOE ID:	28792
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	1392
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 1392 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Spatial Representation:	Bacteriological monitoring samples were collected at Poche Beach in the San Clemente . The posting covers 0.2 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28489
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	490
Number of Exceedances:	35
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 455 single samples were collected with 35 samples exceeding the single sample water quality objective
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28490
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected and 72 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28491
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected.
Data Reference:	From March 2002 through August 2007, there were 34 samples correlated with a storm event and seven of those samples exceeded the single sample maximum objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information. National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28484
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	490
Number of Exceedances:	189
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected with 189 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID: 28485

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 34
Number of Exceedances: 21

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected.

From March 2002 through August 2007, there were 34 samples correlated with storm events. From those 34 samples 21 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28492
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	490
Number of Exceedances:	143
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected with 143 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28493
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected and 72 monthly geomeans calculated. Fifteen of the 72 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28494
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected.
Data Reference:	From March 2002 through August 2007, there were 34 samples correlated with a storm event. From the 34 samples, 13 exceeded the single sample maximum objective . This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information. National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).

Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	

LOE ID:	28486
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	490
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected with six exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	

LOE ID:	28487
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected and 72 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	28488
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected.
	From March 2002 through August 2007, there were 34 samples correlated with a storm event. Two of the 34 samples exceeded the single sample maximum objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional

[Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	

LOE ID:	30724
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	456
Number of Exceedances:	28
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 490 single samples were collected of which 456 are dry weather (AB411) samples with 28 samples exceeding the single sample water quality objective
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID: 31020
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 42
Number of Exceedances: 24
Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans 24 exceeded the geomean water quality objective.
Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation: Samples were collected at least once a week within the time period from January 2002 through December 2007.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	31018
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

**Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach**

Region 9

LOE ID:	30314
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at Poche Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

LOE ID: 31019

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 42
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Poche Beach, station id S-15, in the San Clemente HA. (Latitude 33.44125, Longitude -117.64636).

Temporal Representation: Samples were collected at least once a week within the time period from January 2002 through December 2007.

The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

LOE ID: 77653

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 90
Number of Exceedances: 68

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Sixty-eight of the 90 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, San Clemente HA, at Poche Beach.

Temporal Representation: The samples were collected from January 2008 to January 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

LOE ID: 74677

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 90
Number of Exceedances: 80

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eighty of the 90 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Poche Beach site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	74678
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	100
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Prima Deshecha Channel outlet at Beach Road (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	74679
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	126
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred twenty-six of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Prima Deshecha Channel outlet (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	74680
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	30
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin. California Ocean Plan. Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Prima Deshecha Channel outlet at Beach Road (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	

LOE ID:	74701
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	55
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-five of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Prima Deshecha Channel outlet (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	

LOE ID:	74702
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 90 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Poche Beach site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

LOE ID:	74703
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	108
Number of Exceedances:	43
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, San Clemente HA, at Poche Beach to determine beneficial use support and results are as follows: 43 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Clemente HA, at Poche Beach was collected at 1 monitoring site [Poche Beach]

Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	74704
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 147 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Prima Deshecha Channel outlet at Beach Road (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	74705
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	47

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty-seven of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Prima Deshecha Channel outlet (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44202, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach

Region 9

LOE ID:	74706
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 90 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Poche Beach site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach](#)
Water Body ID: CAC9013000020090419002355
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44201	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. With the latest data, eight of the 140 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, eight of the 140 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach	

LOE ID:	28385
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with 11 samples correlated with a storm event. One of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID:	30975
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.

Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

LOE ID:	28384
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	548
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with four exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID: 28386

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with no samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID: 28387

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

LOE ID:	28388
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were with 11 samples correlated with a storm event.
Data Reference:	From the 11 samples, none exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information. National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same period of time.
Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID: 28390

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected and 32 monthly geomean calculated. None of the 32 monthly geomean exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID:	28391
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected with 11 samples correlated with a storm event. None of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID:	28392
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID:	28393
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans, only one exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID: 30974

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006.

Data Reference: A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

LOE ID:	30622
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	537
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected of which 537 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach**

LOE ID:	30831
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	537
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected of which 537 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

LOE ID:	30315
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach
Region 9

LOE ID:	30726
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	536
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected of which 536 are dry weather (AB411) samples with no samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach
Region 9

LOE ID:	28394
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through

Data Reference:	<p>December 2006. A total of 548 single samples were collected with 11 samples correlated with a storm event. From the 11 samples, none exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p> <p>National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	<p>Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).</p> <p>Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency</p>
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	<p>Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.</p> <p>County of Orange, Quality Assurance/Quality Control Manual, February 2004</p>

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID:	74730
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 108 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Plaza A La Playa (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from January 2007 to June 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach	

LOE ID: 74731

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 120
Number of Exceedances: 2

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Two of the 120 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Plaza A La Playa (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from January 2007 to June 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach	

LOE ID: 74732

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 108 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Plaza A La Playa (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from January 2007 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID:	74733
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	120
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 120 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Plaza A La Playa (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from January 2007 to June 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID: 74734

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 108 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Plaza A La Playa (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from January 2007 to June 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID: 74707

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	120
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 120 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Plaza A La Playa (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from January 2007 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID:	30976
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans one exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period(SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44201, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach

Region 9

LOE ID: 28389

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 547
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected with no samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, Riviera Beach (station id RIVERA) off of Plaza de la Playa (Latitude 33.40854N, Longitude 117.60942 W).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier](#)
Water Body ID: CAC9013000020090419001811
Water Body Type: Coastal & Bay Shoreline

DECISION ID	42681	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 3.2 of the Listing Policy. Under section 3.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 80 of 166 geomean samples exceed the water quality objective for enterococcus and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier	

LOE ID:	74816
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	74
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seventy-four of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain Beneath San Clemente Pier (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID:	74791
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	28
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-eight of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected from the coastal stormdrain beneath San Clemente Pier (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID: 74818

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134
Number of Exceedances: 3

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Three of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain Beneath San Clemente Pier (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID: 74819

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 147 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from a coastal stormdrain beneath San Clemente Pier (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier	

LOE ID:	74820
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from Coastal Stormdrain Beneath San Clemente Pier (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier	

LOE ID:	74817
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	13
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirteen of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from the coastal stormdrain beneath San Clemente Pier (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier	

LOE ID:	30984
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans one exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID:	30985
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans six exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID: 30983

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier**

LOE ID:	30319
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier**

LOE ID:	30729
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	535
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through

December 2006. A total of 547 single samples were collected of which 535 are dry weather (AB411) samples with 14 samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID: 30834

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 536

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station

	id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier	

LOE ID:	30628
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	536
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with 14 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier	

LOE ID:	28452
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. None of the 12 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID:	28451
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through

Data Reference:	December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective. The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID:	28458
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID: 28450

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with no samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

Region 9

LOE ID:	28449
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, four exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

Region 9

LOE ID:	28448
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	548
Number of Exceedances:	42
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 42 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID:	28457
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans calculated. From the 32 geomeans, six exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID: 28456

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 16

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 16 samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID:	28455
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 12 samples correlated with a storm event. None of the 12 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier**

LOE ID:	28454
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans, one exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 42681, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier

LOE ID:	28453
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected with 14 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente HA, San Clemente City Beach at Pier (station id PIER). This is found underneath the Municipal Pier in San Clemente (Latitude: 33.41957, Longitude: -117.62000).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras](#)
Water Body ID: CAC9013000020090419004107
Water Body Type: Coastal & Bay Shoreline

DECISION ID	32378	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of 159 geomean samples exceed the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of 159 geomean samples exceed the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras	

LOE ID: 28349
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	423
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	30835
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	387
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected of which 387 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation:

Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 28352

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 423
Number of Exceedances: 15

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected with 15 samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).
Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.
Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation:

Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 28353

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected with 72 monthly geomeans calculated. None of the 72 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	28435
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	367
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 367 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of

Data Reference:	Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at North Beach, 450 feet North of Pier, Trafalgar Street, Avenida Calafia, Avenida de Las Palmeras. The posting covers 3.2 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	28346
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	423
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 28351

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 36
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected.

Data Reference: From March 2002 through December 2007, there were 36 samples correlated with a storm event. From the 36 samples, 3 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml

Objective/Criterion Reference: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff

because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 28347

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 72
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected and 72 monthly geomeans calculated. None of the monthly geomeans exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 28348

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected.
	From March 2002 through December 2007, there were 36 samples correlated with a storm event. None of the 36 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	28350
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected and 72 monthly geomeans

calculated. None of the monthly geomeans exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 28344

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 423

Number of Exceedances: 12

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected with 12 exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 28345

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 36
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected.

From March 2002 through December 2007, there were 36 samples correlated with storm events. From the 36 samples, 11 exceeded the single sample maximum water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 77654

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 87 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras.
Temporal Representation:	The samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	74844
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 87 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the Las Palmeras site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	74843
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	105
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras to determine beneficial use support and results are as follows: 3 of 105 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras was collected at 1 monitoring site [Las Palmeras]
Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	31030
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007;. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	31031
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week within the time period from January 2002 through December 2007.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID: 31032

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 42
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.

Temporal Representation: Samples were collected at least once a week within the time period from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	74821
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 87 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Las Palmeras site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	74822
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 87 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Las Palmeras site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	30629
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	387
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples; 387 are dry weather (AB411) samples, five of which exceeded the criteria for recreational use.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32378, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras

LOE ID:	28354
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	10

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 423 single samples were collected.
	From March 2002 through December 2007, there were 36 samples correlated with storm events. From the 36 samples, 10 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at the projection of Las Palmeras, S-23, in the San Clemente HA. Lat/Long: 33.3958/-117.60024.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach](#)
Water Body ID: CAC9013000020090419231954
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44022	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. With the latest data, five of the 207 geomean samples exceed the water quality objective for enterococcus of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, five of the 207 geomean samples exceed the water quality objective for enterococcus of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach	

LOE ID: 28396
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting

Number of Samples:	548
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with one exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	28397
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. None of the samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 28398

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with no samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 28399

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 28400

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. None of the samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach	

LOE ID:	28401
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	28402
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 32 monthly geomeans calculated. None of the 32 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 28403

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 12 samples correlated with a storm event. None of the 12 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time frame.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information Reference(s): Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	28405
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with only one sample exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach	

LOE ID:	28406
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation: Environmental Conditions:	Samples were collected at least once a week from May 2004 through December 2006.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	28407
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, only one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500

yards south of Trafalgar Canyon pipe.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time frame.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 30630

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 536
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	30836
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	536
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	30320
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments that each represent an area near the

sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach	

LOE ID: 74845

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 2

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Two of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample total coliform concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from site LADERA, Coastal Stormdrain at W Avenida Valencia / Boca Del Canon (surfzone upcoast and downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to June 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 74846

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134
Number of Exceedances: 4

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Four of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at W Avenida Valencia / Boca Del Canon(surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach**

LOE ID: 74847

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 41
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: One of the 41 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Trafalgar Street Beach site.

Temporal Representation:

Samples were collected from January 2008 to October 2009.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 74848

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: One of the 147 samples exceeded the fecal coliform objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml.
Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected from site LADERA, Coastal Stormdrain at W Avenida Valencia / Boca Del Canon (surfzone upcoast and downcoast).

Temporal Representation:

The samples were collected once a week from July 2006 to June 2009.

Environmental Conditions:

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 74849

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at W Avenida Valencia / Boca Del Canon (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	74870
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 41 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 400 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Trafalgar Street Beach site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach**

LOE ID:	74871
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 147 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site LADERA, Coastal Stormdrain at W Avenida Valencia / Boca Del Canon (surfzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach**

LOE ID:	74872
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at W Avenida Valencia / Boca Del Canon (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach	

LOE ID:	74873
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 41 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Trafalgar Street Beach site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach	

LOE ID:	30986
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period(SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	30987
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID:	30988
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml within the time period over a 30 day period(SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44022, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach

LOE ID: 30730

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 535

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected of which 535 are dry weather (AB411) samples with no samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at S. Trafalgar St., station id LADERA. This location is found approximately 500 yards south of Trafalgar Canyon pipe.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet](#)
Water Body ID: CAC9013000020090419000627
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43497	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. With the latest data, eight of the 166 geomean samples exceeded the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, eight of the 166 geomean samples exceeded the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	28411
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. None of the 32 monthly geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID:	30991
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .

Temporal Representation: Samples were collected at least once a week within the time period from January 2004 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID: 28416

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with one sample exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID:	28412
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. None of the 12 storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same time frame.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet**

LOE ID:	28418
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with 12 sample correlated with a storm event. From the 12 samples, only one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID:	28408
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	548
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with five exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID:	28409
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. From the 12 samples only one exceeded single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente

	City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same time frame.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	28410
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with no samples exceeding single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	28413
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	28414
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected and 32 geomeans calculated. From the 32 geomeans, none exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID:	28417
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID: 30731

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 535
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected of which 535 are dry weather (AB411) samples with no samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID: 30631

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID:	30837
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with none of the samples exceeding single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet
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LOE ID:	30321
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	<p>Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.</p> <p>For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.</p>
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet
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LOE ID:	74894
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Trafalgar Canyon (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	74895
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 147 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from Trafalgar Canyon Between Esplanade and Cazador Lane (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	74896
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from Trafalgar Canyon (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	74874
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	147
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Trafalgar Canyon Between Esplanade and Cazador Lane (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID:	74875
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Trafalgar Canyon (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID: 74876

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Trafalgar Canyon Between Esplanade and Cazador Lane (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID: 30989

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from

	January 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .
Temporal Representation:	Samples were collected at least once a week within the time period from January 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet	

LOE ID:	30990
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .

Temporal Representation: Samples were collected at least once a week within the time period from January 2004 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43497, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet

LOE ID: 28415

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 12
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 547 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, none exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Trafalgar Canyon outlet (station id TRFCYN). (Latitude: 33.41796 Longitude: 117.61787). .

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff

because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier](#)
Water Body ID: CAC9013000020090418233959
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44099	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 13 of 162 geomean samples exceed the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 13 of 162 geomean samples exceed the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier	

LOE ID: 28432
Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 2555

Number of Exceedances:	367
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 367 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at North Beach, 450 feet North of Pier, Trafalgar Street, Avenida Calafia, Avenida de Las Palmeras. The posting covers 3.2 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier		
LOE ID:	28328	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	72	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected with 72 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.	
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007	

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID:	28329
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected. From March 2002 through December 2007, 36 samples were correlated with a storm event. From those 36 samples, 13 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-

Temporal Representation: 19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID: 77655

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 89
Number of Exceedances: 8

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Eight of the 89 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450' North of Pier.

Temporal Representation: The samples were collected from January 2008 to January 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID: 74897

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	13
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirteen of the 90 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Dana Point Harbor, San Clemente City Beach, 450 Feet North of Pier site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier	

LOE ID:	74898
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 89 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Clemente City Beach, 450 feet North of Pier site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier**

LOE ID:	74899
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	107
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450â€™ North of Pier to determine beneficial use support and results are as follows: 8 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450â€™ North of Pier was collected at 1 monitoring site [450' North of Pier]
Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier**

LOE ID:	74900
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 89 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not

Objective/Criterion Reference: exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Clemente City Beach, 450 feet North of Pier site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier	

LOE ID: 31026

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 42
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans one exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation: Samples were collected at least once a week within the time period from January 2002 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier	

LOE ID: 30632

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	395
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected of which 395 are dry weather (AB411) samples with 15 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier	

LOE ID:	31024
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID:	31025
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st

to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID: 30838

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 395
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected of which 395 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID: 28326

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected.
Data Reference:	From March 2002 through December 2007, there were 36 samples correlated with a storm event. Of those 36 samples, five exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information. National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).
Objective/Criterion Reference:	Comparison to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier		
LOE ID:	28327	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	431	
Number of Exceedances:	28	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected with 28 exceeding the single sample water quality objective.	
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater	

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID:	28322
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	431
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected with none exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID: 28323

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 36
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected.

From March 2002 to August 2007, 34 samples were correlated with a storm event. None of the 34 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID:	28324
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	431
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier**

LOE ID:	28325
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected with 72 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID:	30732
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	395
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected of which 395 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID: 28319

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 431
Number of Exceedances: 45

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected with 45 exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID: 28320

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 36
Number of Exceedances: 19

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 430 single samples were collected.
	From March 2002 through December 2007, 36 samples were correlated with a storm event. Of those 36 samples, 19 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44099, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier

LOE ID:	28321
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 431 single samples were collected with 72 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location for this line of evidence located 450 feet north of the pier, S-19, in the San Clemente HA. Lat/Long: 33.42074/-117.62134.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach](#)
Water Body ID: CAC9013000020090418232344
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43328	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under Section 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 76 of 448 samples exceeded the SSM criterion for Total Coliform for the protection of SHELL and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The 20 Beach and Creek TMDL was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	

LOE ID:	28436
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories

Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	367
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 367 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at North Beach, 450 feet North of Pier, Trafalgar Street, Avenida Calafia, Avenida de Las Palmeras. The posting covers 3.2 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID:	28360
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	36
Number of Exceedances:	20

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected.
	From March 2002 through December 2007, there were 36 samples correlated with storm events. From those 36 samples, 20 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID:	28374
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	76
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected with 76 monthly geomeans calculated. From the 76 geomeans, six exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID:	28372
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	448
Number of Exceedances:	56
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected with 56 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach**

LOE ID:	30633
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	413
Number of Exceedances:	38
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected of which 413 are dry weather (AB411) samples with 38 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach**

LOE ID:	30839
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	412
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected of which 412 are dry weather (AB411) samples with none of those samples exceeding the single sample maximum water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID:	31023
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans two exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	

LOE ID:	31022
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID:	28369
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 447 single samples were collected and 72 monthly geomeans calculated. From the 72 geomeans, none exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach**

LOE ID:	28366
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected.
	From March 2002 through December 2007, there were 36 samples correlated with storm

Data Reference:	<p>events. None of the 36 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p> <p>National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station</p> <p>The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Total coliform density shall not exceed 1,000 per 100ml.</p> <p>Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	<p>Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.</p> <p>Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.</p>
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	

LOE ID:	28371
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 447 single samples were collected.</p> <p>From March 2002 through December 2007, there were 36 samples correlated with a storm event. From the 36 samples, nine exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p>
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	

LOE ID:	28368
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	447
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 447 single samples were collected with 10 exceeding the single sample maximum.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID: 28363

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 72

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected and 72 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID: 28362

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	448
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected with none exceeding the single sample maximum water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID:	31021
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	

LOE ID:	30734
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	411
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 447 single samples were collected of which 411 are dry weather (AB411) samples with one exceeding the single sample maximum.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

Region 9

LOE ID: 28375

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 35
Number of Exceedances: 18

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected.

Data Reference: From March 2002 through December 2007, there were 35 samples correlated with a storm event. From the 35 samples, 18 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information Reference(s): Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43328, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach

LOE ID:	28358
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	448
Number of Exceedances:	76
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 448 single samples were collected with 76 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Beach, S-17, in the San Clemente HA. Lat/Long: 33.43065/-117.63183.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach](#)
Water Body ID: CAC9013000020090418235132
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44651 **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 26 of the 338 samples exceed the water quality objective for total coliform of a SSM of 230/100ml in a 30-day period for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 26 of the 338 samples exceed the water quality objective for total coliform of a SSM of 230/100ml in a 30-day period for the protection of SHELL and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID: 28437
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 278

Number of Exceedances:	24
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 24 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	30840
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	243
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected of which 243 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach	

LOE ID:	31033
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2002 through December 2007. A total of 39 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 39 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week within the time period from July May 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach	

LOE ID:	30735
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	243
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected of which 243 are dry weather (AB411) samples with three exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	31035
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2002 through December 2007. A total of 39 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 39 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week within the time period from May 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	31034
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2002 through December 2007. A total of 39 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 39 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week within the time period from May 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach	

LOE ID: 30634

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 243
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected of which 243 are dry weather (AB411) samples with nine samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).

Temporal Representation: Samples were collected at least once a week from May 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach	

LOE ID: 74918

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 60
Number of Exceedances: 2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach to determine beneficial use support and results are as follows: 2 of 60 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach was collected at 1 monitoring site [Trafalgar Street Beach]
Temporal Representation:	Data was collected over the time period 1/3/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	77656
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Four of the 41 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach.
Temporal Representation:	The samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach**

LOE ID:	28440
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 66 monthly geomeans calculated. None of the 66 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from July May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach**

LOE ID:	28439
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	278
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with one sample exceeding

Data Reference:	the single sample water quality objective. The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	28447
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 35 samples correlated with a storm event. From the 35 samples, eight exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).

Temporal Representation: Samples were collected at least once a week from May 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID: 28446

Pollutant: Enterococcus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 66
 Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
 Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 66 monthly geomeans calculated. From the 66 geomeans only one exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).

Temporal Representation: Samples were collected at least once a week from May 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID: 28445

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	278
Number of Exceedances:	17
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 17 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach	

LOE ID:	28438
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	35
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 35 samples correlated with a storm event. From the 35 samples, 10 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	28442
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	278
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with five exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44651, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach	

LOE ID:	28441
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 35 samples correlated with a storm event. From the 35 samples, only one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	28444
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 35 samples correlated with a storm event. From the 35 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach

LOE ID:	28443
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2002 through December 2007. A total of 278 single samples were collected with 66 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Trafalgar Street, station id OSC01, in the San Clemente HA. (Latitude 33.41825, Longitude:-117.61921).
Temporal Representation:	Samples were collected at least once a week from May 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia](#)
Water Body ID: CAC9013000020090419003030
Water Body Type: Coastal & Bay Shoreline

DECISION ID	32368	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, eight of 160 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, eight of 160 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	30841
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	390
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected of which 390 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	28332
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected.
	From March 2002 through December 2007, there were 36 correlated with a storm event. Of those 36 samples, 13 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	77657
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	88
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 88 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia.
Temporal Representation:	The samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia**

LOE ID:	31029
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia**

LOE ID:	74922
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	88
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 88 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Avenida Calafia site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	28334
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	426
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected with none of the samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia**

LOE ID:	28434
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	367
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2000 to December 2006, there were and 367 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>California Code of Regulations. Title 17, Section 7960.</p> <p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.</p>
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at North Beach, 450 feet North of Pier, Trafalgar Street, Avenida Calafia, Avenida de Las Palmeras. The posting covers 3.2 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia**

LOE ID:	28336
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected.
Data Reference:	<p>From March 2002 through December 2007, there were 36 samples correlated with storm events. None of the samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p> <p>National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Total coliform density shall not exceed 1,000 per 100ml.</p> <p>Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	<p>Comparison to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.</p> <p>Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency</p>
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through August 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	<p>Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.</p> <p>County of Orange, Quality Assurance/Quality Control Manual, February 2004</p>

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	74921
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	106
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia to determine beneficial use support and results are as follows: 5 of 106 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia was collected at 1 monitoring site [AVENIDA CALAFIA]
Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	28331
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	426
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected with 19 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID: 28335

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 72

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected and 72 monthly geomeans calculated. None of the monthly geomeans exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.

Temporal Representation: Samples were collected at least once a week from January 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID: 30635

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	390
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected of which 390 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	28337
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	426
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB,

Objective/Criterion Reference:	2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	28341
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected with 72 monthly geomeans calculated. Only one of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	28340
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	426
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected with 18 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	31028
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.

Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	31027
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 2002 through December 2007. A total of 42 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 42 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.

Temporal Representation:	Samples were collected at least once a week within the time period from January 2002 through December 2007. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	74920
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	88
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 88 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Avenida Calafia site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	74919
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	88
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 88 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Avendida Calafia site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	28338
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected with 72 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia	

LOE ID:	28339
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected.
Data Reference:	<p>From March 2002 through December 2007, there were 36 samples correlated with storm events. From the 36 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p> <p>National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Fecal coliform density shall not exceed 200 per 100ml</p> <p>Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	<p>Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.</p> <p>Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.</p>
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	28342
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected.
Data Reference:	From March 2002 through December 2007, there were 36 samples correlated with storm events. From these 36 samples, 13 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information. National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 32368, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia

LOE ID:	30736
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	390
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2002 through December 2007. A total of 426 single samples were collected of which 390 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at the projection of Avenida Calafia, S-21, in the San Clemente HA. Lat/Long: 33.40515/-117.60689.
Temporal Representation:	Samples were collected at least once a week from January 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores](#)
Water Body ID: CAC9013000020090418224042
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44379 **Region 9**
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 19 of 166 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 19 of 166 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 28423
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 9

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with nine samples correlated with a storm event. None of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores		
LOE ID:	30844	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	539	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected of which 539 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.	

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 28420

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 9

Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with nine sample correlated with a storm event. From the nine samples, three exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 28427

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected six samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	28424
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected and no samples exceeded the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores**

LOE ID:	28425
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected and 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation: Environmental Conditions:	Samples were collected at least once a week from May 2004 through December 2006.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	28421
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 548 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation: Environmental Conditions:	Samples were collected at least once a week from January 2004 through December 2006.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 28426

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with nine samples correlated with a storm event. None of the nine samples the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)
[National Weather Service Forecast Office. San Diego. California. Chronological Regional Temperature and Precipitation Listings by Station](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	28428
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans only one sample exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	28429
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with nine samples correlated with a storm event. From the nine sample, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	28422
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans collected. None of the monthly geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores	

LOE ID: 74997

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at N El Camino Real (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores	

LOE ID: 74998

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 147 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real(surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	74971
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	18
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eighteen of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at N El Camino Real (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 74972

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 146
Number of Exceedances: 12

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Twelve of the 146 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at N El Camino Real(surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 74999

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores	

LOE ID:	74996
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at N El Camino Real (surfzone

Temporal Representation:	upcoast and surfzone downcoast).
Environmental Conditions:	The samples were collected once a week from July 2006 to 2009.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores	

LOE ID:	31001
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period. AB411 excludes the consideration of wet weather data.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores	

LOE ID:	30739
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	538
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected of which 538 are dry weather (AB411) samples with no samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	30999
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID:	31000
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through

December 2006.

The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period. AB411 excludes the consideration of wet weather data.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 30638

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 539
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 539 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44379, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores

LOE ID: 28419

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	548
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with nine exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, South Poche Beach at Capistrano Shores (station id SCCS52). (Latitude: 33.43545 Longitude: -117.63784).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Bahia Point](#)
Water Body ID: CAC9075100020090422203910
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43165	Region 9
Mission Bay Shoreline, at Bahia Point		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 21 of 121 geomean samples collected in AB411 period exceed the water quality objective (WQO) of 35/100ml in a 30-day period, and 63 of 456 samples collected in AB411 period exceed the SSM WQO for enterococcus of 104/100ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 21 of 121 geomean samples collected in AB411 period exceed the water quality objective (WQO) of 35/100ml in a 30-day period, and 63 of 456 samples collected in AB411 period exceed the SSM WQO for enterococcus of 104/100ml and this exceeds the allowable frequency of AB411 period listed in Section 4.3 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bahia Point	

LOE ID:	28669
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	79
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 399 single samples were collected with 79 monthly geomeans calculated. Sixteen of the 79 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	28670
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 399 single samples were collected with 15 samples correlated with a storm event. Seven of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	81125
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Bahia Point to determine beneficial use support and results are as follows: 0 of 63 samples (AB 411 period) exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1000 per 100ml in any 30-day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Bahia Point was collected at 1

Temporal Representation:	monitoring site [Bahia Point]
Environmental Conditions:	Data was collected over the AB 411 time period 4/2/2008-8/24/2010.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bahia Point	

LOE ID:	81126
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Bahia Point to determine beneficial use support and results are as follows: 10 of 63 samples (AB411 period) exceed the criterion for Enterococcus.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100ml in any 30-day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Bahia Point was collected at 1 monitoring site [Bahia Point]
Temporal Representation:	Data was collected over the AB411 time period 4/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bahia Point	

LOE ID:	81127
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Bahia Point to determine beneficial use support and results are as follows: 6 of 72 samples (AB 411 period) exceed

Data Reference:	the criterion for Enterococcus. Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Bahia Point was collected at 1 monitoring site [Bahia Point]
Temporal Representation:	Data was collected over the time period 4/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID:	81128
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Bahia Point to determine beneficial use support and results are as follows: 0 of 63 samples (AB 411 period) exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: fecal coliform density shall not exceed 200 per 100ml in any 30-day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Bahia Point was collected at 1 monitoring site [Bahia Point]
Temporal Representation:	Data was collected over the AB 411 time period 4/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID:	81129
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Bahia Point to determine beneficial use support and results are as follows: 0 of 72 samples (AB 411 period) exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: fecal coliform density shall not exceed 400 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Bahia Point was collected at 1 monitoring site [Bahia Point]
Temporal Representation:	Data was collected over the AB 411 time period 4/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID:	74328
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	72
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Bahia Point to determine beneficial use support and results are as follows: 2 of 72 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Bahia Point was collected at 1 monitoring site [Bahia Point]
Temporal Representation:	Data was collected over the time period 4/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	30780
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	382
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 397 single samples were collected of which 382 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	30543
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	384
Number of Exceedances:	57
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 399 single samples were collected of which 384 are dry weather (AB411) samples and with 57 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	28734
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	79
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 1999 through October 2007. A total of 397 single samples were collected with 79 monthly geomeans calculated. One of the 79 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	28682
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	358
Number of Exceedances:	43
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 358 single samples were collected with 43 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	28746
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	397
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 397 single samples were collected with eight samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	31334
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 309 dry month (April through October) single samples were collected with 58 dry month geomeans calculated. Eleven of the 58 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID:	31335
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 268 dry month (April through October) single samples were collected with 49 dry month geomeans calculated. Four of the 49 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.

Temporal Representation:

Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID: 30338

Pollutant: Indicator Bacteria

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2933

Number of Exceedances: 959

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Below is a copy of the 2006 LOE for the data supporting the listing of Mission Bay Shoreline:

Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or

(B) 10,000 total coliform bacteria per 100 milliliters; or

(C) 400 fecal coliform bacteria per 100 milliliters; or

(D) 104 enterococcus bacteria per 100 milliliters.

Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:

(A) 1,000 total coliform bacteria per 100 milliliters; or

(B) 200 fecal coliform bacteria per 100 milliliters; or

(C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

assessed. 'Mission Bay Shoreline, at Bahia Point ' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing From 03/21/2000-10/30/2005.

Data record: 2000-2005, San Diego County Health Dept.

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID: 31336

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 58
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 307 dry month (April through October) single samples were collected with 58 dry month geomeans calculated. None of the 58 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID: 28740

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 397 single samples were collected with 15 samples correlated with a storm event. Three of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	30528
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	344
Number of Exceedances:	37

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 344 dry weather single samples were collected with 37 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID:	30107
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	128
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 128 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange, March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information:

Bacteriological monitoring samples were collected at Bahia Point in Mission Bay.

The beach posting covers the time frame of January 2001 -December 2007.

QAPP Information Reference(s):

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID:

28686

Pollutant:

Fecal Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

70

Number of Exceedances:

4

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 358 single samples were collected and 70 geomeans calculated. Four of the 70 geomeans exceeded the geomean water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID: 28687

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 14
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 358 single samples were collected with 14 samples correlated with a storm event. Six of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID: 28644

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	397
Number of Exceedances:	75
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 397 single samples were collected with 75 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria
Mission Bay Shoreline, at Bahia Point

Region 9

LOE ID:	28646
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 397 single samples were collected with 15 samples correlated with a storm event. Nine of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43165, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bahia Point

LOE ID:	28668
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	399
Number of Exceedances:	64
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 399 single samples were collected with 64 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected from Bahia Point, San Diego, California. Station identification number is MB-160.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Balboa Court](#)
Water Body ID: CAC9075100020090422200349
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44224	Region 9
Mission Bay Shoreline, at Balboa Court		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Both REC-1 and SHELL beneficial uses are evaluated in this decision. With the latest data, zero of the 66 samples exceeded the Water Quality Objective (WQO) for REC-1 of a geomean of 1000 /100 ml for Total Coliform, one of the 66 samples exceeded the geomean of 35/100 ml for Enterococci, zero out of the 58 samples exceeded the geomean of 200/100 ml for Fecal Coliform , and 11 out of 217 exceeded the WQO for SHELL of 230/100 ml for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, zero of the 66 samples exceeded the Water Quality Objective (WQO) for REC-1 of a geomean of 1000 /100 ml for Total Coliform, one of the 66 samples exceeded the geomean of 35/100 ml for Enterococci, zero out of the 58 samples exceeded the geomean of 200/100 ml for Fecal Coliform , and 11 out of 217 exceeded the WQO for SHELL of 230/100 ml for Total Coliform. These do not exceed the allowable frequencies referred to in Section 4.3 and 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Balboa Court	

LOE ID: 28606
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 150 single samples were collected with 3 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	28610
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 192 single samples were collected with 45 monthly geomeans calculated. None of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria
Mission Bay Shoreline, at Balboa Court

Region 9

LOE ID:	28611
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 150 single samples were collected and 36 geomeans calculated. None of the 36 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria
Mission Bay Shoreline, at Balboa Court

Region 9

LOE ID:	28612
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 191 single samples were collected with 45 monthly geomeans calculated. None of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria
Mission Bay Shoreline, at Balboa Court

Region 9

LOE ID:	28607
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 150 single samples were collected with no samples correlated with a storm event. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information:	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria
Mission Bay Shoreline, at Balboa Court

Region 9

LOE ID:	28608
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	191
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data June 2001 through December 2007. A total of 191 single samples were collected with nine samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	28609
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 191 single samples were collected with one sample correlated with a storm event. The one sample did not exceed the water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event

was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information:

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria
Mission Bay Shoreline, at Balboa Court

Region 9

LOE ID: 77603

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 21
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Zero of the twenty one samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Mission Bay Shoreline, at Balboa Court.
Temporal Representation: The samples were collected from April 2008 to September 2008.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria
Mission Bay Shoreline, at Balboa Court

Region 9

LOE ID: 74329

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Balboa Court site (BW761).
Temporal Representation:	Samples were collected approximately once a week from April 2, 2008 to September 23, 2008 (dry weather data only).
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	74330
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Balboa Court site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Mission Bay Shoreline, at Balboa Court

LOE ID:	74331
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Balboa Court to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Balboa Court was collected at 1 monitoring site [Balboa Ct.]
Temporal Representation:	Data was collected over the time period 4/2/2008-9/23/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	74332
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Balboa Court site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	31115
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through October 2007. A total of 148 dry month (April through October) single samples were collected with 36 dry month geomeans calculated. None of the 36 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	31114
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through October 2007. A total of 188 dry month (April through October) single samples were collected with 44 dry month geomeans calculated. One of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	31116
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through October 2007. A total of 109 dry month (April through October) single samples were collected with 44 dry month geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.

Temporal Representation: Samples were collected from June 2001 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID: 30339

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2933
Number of Exceedances: 959

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Below is a copy of the 2006 LOE for the data supporting the listing of Mission Bay Shoreline:

Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:
(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or
(B) 10,000 total coliform bacteria per 100 milliliters; or
(C) 400 fecal coliform bacteria per 100 milliliters; or
(D) 104 enterococcus bacteria per 100 milliliters.

Based on the mean of the logarithms of the results of at least five weekly samples during

any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:

- (A) 1,000 total coliform bacteria per 100 milliliters; or
- (B) 200 fecal coliform bacteria per 100 milliliters; or
- (C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Balboa Court' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing From 03/21/2000-10/30/2005.

Temporal Representation:

Environmental Conditions:

QAPP Information:

Data record: 2000-2005, San Diego County Health Dept.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID: 30108

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 17

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 17 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [County of Orange, March 2007, Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Balboa Court in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Balboa Court	

LOE ID:	30781
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	191
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 192 single samples were collected of which 191 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Balboa Court	

LOE ID:	28603
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 192 single samples were collected with one sample correlated with a storm event. This sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information:	
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria
Mission Bay Shoreline, at Balboa Court

Region 9

LOE ID:	30544
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	190
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data June 2001 through December 2007. A total of 191 single samples were collected of which 190 are dry weather (AB411) samples with nine samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	28601
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	192
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 192 single samples were collected with 11 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Balboa Court, San Diego, California. Station identification number is MB-225.

Temporal Representation:

Samples were collected from June 2001 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID: 28604

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 192

Number of Exceedances: 1

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 192 single samples were collected with one sample exceeding the single sample water quality objective.

Data Reference:

[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.

Temporal Representation:

Samples were collected from June 2001 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44224, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Balboa Court

LOE ID:	28605
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2001 through December 2007. A total of 192 single samples were collected with one samples correlated with a storm event. This sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Balboa Court, San Diego, California. Station identification number is MB-225.
Temporal Representation:	Samples were collected from June 2001 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information:	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Bonita Cove](#)
Water Body ID: CAC9075200020090422202127
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43760	Region 9
Mission Bay Shoreline, at Bonita Cove		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 120 of 461 single samples exceed the water quality objective for total coliform of a SSM of 230/100 ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 120 of 461 single samples exceed the water quality objective for total coliform of a SSM of 230/100 ml for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bonita Cove	

LOE ID: 28691
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	418
Number of Exceedances:	45
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 418 single samples were collected with 45 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID:	28678
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	71
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 418 single samples were collected and 71 geomeans calculated. None of the 71 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bonita Cove	

LOE ID: 77604

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Zero of the zero samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from one site at Mission Bay Shoreline, at Bonita Cove (Mariners), north end.

Temporal Representation: Two samples were collected on July 7, 2008 and September 1, 2008, respectively.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bonita Cove	

LOE ID: 74333

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Bonita Cove to determine beneficial use support and results are as follows: one of two samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Bonita Cove was collected at one monitoring site [Bonita Cove (north end)]
Temporal Representation:	Data was collected on 07/07/2008 and 09/01/2008, respectively.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID:	31156
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through August 2004. A total of 234 dry month (April through October) single samples were collected with 36 dry month geomeans calculated. One of the 36 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from April 1999 through August 2004.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bonita Cove

LOE ID:	31155
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through August 2004. A total of 235 dry month (April through October) single samples were collected with 36 dry month geomeans calculated. 14 of the 36 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from April 1999 through August 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bonita Cove

LOE ID:	31157
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through August 2004. A total of 233 dry month (April through October) single samples were collected with 36 dry month geomeans calculated. None of the 36 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from April 1999 through August 2004.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Bonita Cove**

LOE ID:	30782
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	442
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 459 single samples were collected of which 442 are dry

	weather (AB411) samples with four samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bonita Cove

LOE ID:	30529
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	402
Number of Exceedances:	42
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 402 dry weather single samples were collected with 42 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID: 28736

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 459

Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 459 single samples were collected with five samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID: 28745

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 459 single samples were collected with 78 monthly geomeans calculated. One of the 78 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID:	28649
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	17
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 459 single samples were collected with 17 samples correlated with a storm event. Eight of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal

Data Reference:	information. National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID:	28663
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	461
Number of Exceedances:	80
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 461 single samples were collected with 80 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bonita Cove

LOE ID: 28655

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 17
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 461 single samples were collected with 17 samples correlated with a storm event. Four of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach

monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bonita Cove

LOE ID: 28683

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 418 single samples were collected with 16 samples correlated with a storm event. Three of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID: 28656

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 78
Number of Exceedances: 19

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 461 single samples were collected with 78 monthly geomeans calculated. Nineteen of the 78 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID: 30340

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2933

Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Below is a copy of the 2006 LOE for the data supporting the listing of Mission Bay Shoreline: Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007). Placeholder reference 2006 303(d)
Data Reference:	
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters. Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999). Placeholder reference 2006 303(d)
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Bonita Cove' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing From 03/21/2000-10/30/2005.
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria		Region 9
Mission Bay Shoreline, at Bonita Cove		
LOE ID:	28742	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	17	
Number of Exceedances:	1	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 459 single samples were collected with 17 samples	

correlated with a storm event. One of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Bonita Cove

LOE ID: 30109

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: -N/A

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 102

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 102 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the

Data Reference:	bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Bonita Cove in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove

Region 9

LOE ID:	28650
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	459
Number of Exceedances:	119
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 459 single samples were collected with 119 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43760, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bonita Cove	

LOE ID:	30545
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	444
Number of Exceedances:	76
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 461 single samples were collected of which 444 are dry weather (AB411) samples with 76 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonita Cove, San Diego, California. Station identification number is MB-170.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Campland](#)
Water Body ID: CAC9064000020090422205328
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43800	Region 9
Mission Bay Shoreline, at Campland		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. With new data for Total Coliform, 247 of the 576 samples exceed the Water Quality Objective of a single sample maximum of 230 /100 ml for Total Coliform for Shell Fish Harvesting. With new data for Enterococcus, 41 out of 144 samples exceed the Water Quality Objective of a geomean of 35/100 ml for REC-1 beneficial use for AB411 period.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 247 of 576 samples exceeded the Water Quality Objective of a single sample maximum of 230 /100 ml for Total Coliform for Shell Fish Harvesting; and 41 out of 144 samples exceed the Water Quality Objective of a geomean of 35/100 ml for REC-1 beneficial use for AB411 period. The above exceed the allowable frequency listed in Table 4.2 and Section 4.3 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Campland	

LOE ID: 28673
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	492
Number of Exceedances:	124
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected with 124 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	28675
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	38
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected with 85 monthly geomeans calculated. Thirty eight of the 85 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	77605
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	84
Number of Exceedances:	30
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Thirty of the 84 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Campland.
Temporal Representation:	The samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	74337
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	22
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty two of the 85 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Campland site. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID:	74338
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	84
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 84 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Campland site.
Temporal Representation: Samples were collected approximately once a week from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID: 74339

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 96
Number of Exceedances: 15

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Mission Bay Shoreline, at Campland to determine beneficial use support and results are as follows: 15 of 96 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Bay Shoreline, at Campland was collected at 1 monitoring site [Campland swimming beach]
Temporal Representation: Data was collected over the time period April 2008 to August 2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID: 74340

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 85
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 85 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Campland site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	31158
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 335 dry month (April through October) single samples were collected with 59 dry month geomeans calculated. 19 of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID: 31159

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 53
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 285 dry month (April through October) single samples were collected with 53 dry month geomeans calculated. 4 of the 53 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID: 31160

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 336 dry month (April through October) single samples were collected with 59 dry month geomeans calculated. 2 of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. Station identification number is MB-080.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID:	30110
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	378
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 378 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange, March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Campland in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	30783
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	472
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected of which 472 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. Station identification is MB-

Temporal Representation: 080.
 Environmental Conditions: Samples were collected from January 1999 through October 2007.
 QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
 QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Campland	

LOE ID:	28738
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected with 20 samples correlated with a storm event. Eight of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. Station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Campland**

LOE ID:	28647
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	492
Number of Exceedances:	217
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 492 single samples were collected with 217 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Campland, San Diego, California. Station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Campland**

LOE ID:	30530
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	418
Number of Exceedances:	77
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999

Data Reference:	through October 2007. A total of 418 dry weather (AB411) single samples were collected with 77 samples exceeding the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	28633
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	20
Number of Exceedances:	17
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected with 20 samples correlated with a storm event. Seventeen of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Campland, San Diego, California. Station location ID is MB-080.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID: 30341

Pollutant: Indicator Bacteria

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2933

Number of Exceedances: 959

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Below is a copy of the 2006 LOE for the data supporting the listing of Mission Bay Shoreline:

Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geometric mean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:

- (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or
- (B) 10,000 total coliform bacteria per 100 milliliters; or
- (C) 400 fecal coliform bacteria per 100 milliliters; or
- (D) 104 enterococcus bacteria per 100 milliliters.

Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:

- (A) 1,000 total coliform bacteria per 100 milliliters; or
- (B) 200 fecal coliform bacteria per 100 milliliters; or
- (C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).

Objective/Criterion Reference:

[Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Campland' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing
From 03/21/2000-10/30/2005.

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Data record: 2000-2005, San Diego County Health Dept.

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID: 28737

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 85
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected with 85 monthly geomeans calculated. Nine of the 85 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected from Campland, San Diego, California. Station identification number is MB-080.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	28739
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	492
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected with 13 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. Station identification is MB-080.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID:	30546
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	471
Number of Exceedances:	110
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected of which 471 are dry weather (AB411) samples with 110 samples exceeding the single sample water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID:	28684
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 438 single samples were collected with 20 samples correlated with a storm event. Of the 21 samples, 13 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Campland

LOE ID: 28685

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 438
Number of Exceedances: 90

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 438 single samples were collected with 90 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID:	28695
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 438 single samples were collected and 78 geomeans calculated. Seven of the 78 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43800, Indicator Bacteria
Mission Bay Shoreline, at Campland

Region 9

LOE ID:	28674
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 492 single samples were collected with 21 samples correlated with a storm event. Fourteen of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Campland, San Diego, California. The monitoring station identification number is MB-080.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at De Anza Cove](#)
Water Body ID: CAC9064000020090422210612
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44431	Region 9
Mission Bay Shoreline, at De Anza Cove		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. With the new information of Total Coliform, 196 of the 640 samples exceed the Water Quality Objective of a Single Sample Maximum of 230 /100 ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 196 of the 640 samples exceed the Water Quality Objective for Total Coliform of a Single Sample Maximum of 230 /100 ml for the protection of SHELL beneficial use, and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria	Region 9
Mission Bay Shoreline, at De Anza Cove	

LOE ID:	30547
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	421
Number of Exceedances:	65
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 440 single samples were collected of which 421 are dry weather (AB411) samples with 65 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	30342
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Below is a copy of the 2006 LOE for the data supporting the listing of Mission Bay Shoreline: Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	<p>Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or</p> <p>(B) 10,000 total coliform bacteria per 100 milliliters; or</p> <p>(C) 400 fecal coliform bacteria per 100 milliliters; or</p> <p>(D) 104 enterococcus bacteria per 100 milliliters.</p> <p>Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters; or</p> <p>(B) 200 fecal coliform bacteria per 100 milliliters; or</p> <p>(C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at De Anza Cove' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing
Temporal Representation:	From 03/21/2000-10/30/2005.
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria		Region 9
Mission Bay Shoreline, at De Anza Cove		
LOE ID:	31213	
Pollutant:	Fecal Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	51	
Number of Exceedances:	4	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 283 dry month (April through October) single samples were collected with 51 dry month geomeans calculated. 4 of the 51 geomeans exceeded the geomean water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;	
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).	
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency	

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID: 31214

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 324 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 2 of the 60 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	30111
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	168
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 168 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at De Anza Cove in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria
Mission Bay Shoreline, at De Anza Cove

Region 9

LOE ID:	30784
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	419
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 436 single samples were collected of which 419 are dry weather (AB411) samples with seven samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	30531
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	377
Number of Exceedances:	56
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 377 dry weather (AB411) single samples were collected with 56 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	28572
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 440 single samples were collected with 81 monthly geomeans calculated. Two of the 81 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria
Mission Bay Shoreline, at De Anza Cove

Region 9

LOE ID:	28573
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	73
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 395 single samples were collected and 73 geomeans calculated. Three of the 73 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria
Mission Bay Shoreline, at De Anza Cove

Region 9

LOE ID:	28574
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	25
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 440 single samples were collected with 81 monthly geomeans calculated. Twenty five of the 81 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	28565
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 436 single samples were collected with 17 samples correlated with a storm event. Three of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	28566
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	395
Number of Exceedances:	65
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 395 single samples were collected with 65 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria
Mission Bay Shoreline, at De Anza Cove

Region 9

LOE ID: 28568

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 18
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 395 single samples were collected with 18 samples correlated with a storm event. Nine of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria
Mission Bay Shoreline, at De Anza Cove

Region 9

LOE ID: 28562

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	436
Number of Exceedances:	149
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 436 single samples were collected with 149 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at DeAnza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria
Mission Bay Shoreline, at De Anza Cove

Region 9

LOE ID:	28563
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	17
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 436 single samples were collected with 17 samples correlated with a storm event. Twelve of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	28564
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	436
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 436 single samples were collected with 10 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID: 28569

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 440

Number of Exceedances: 76

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 440 single samples were collected with 76 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID: 28571

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 440 single samples were collected with 19 samples correlated with a storm event. Eleven of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria
Mission Bay Shoreline, at De Anza Cove

Region 9

LOE ID:	31212
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 327 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 14 of the 60 geomeans exceeded the

Data Reference:	geomean water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at De Anza Cove near storm drain, San Diego, California. Station identification number is MB-070.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 44431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at De Anza Cove

LOE ID:	74341
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	204
Number of Exceedances:	47
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at De Anza Cove to determine beneficial use support and results are as follows: 47 of 204 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at De Anza Cove was collected at 2 monitoring sites [De Anza Cove west, De Anza Cove]
Temporal Representation:	Data was collected over the time period 1/13/2005-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Fanual Park](#)
Water Body ID: CAC9075100020090422204836
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44432	Region 9
Mission Bay Shoreline, at Fanual Park		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. Considering the latest Total Coliform data, 74 of the 420 samples exceed the criteria for Total Coliform of a SSM of 230/100 ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Considering the latest Total Coliform data, 74 of the 420 samples exceed the criteria for Total Coliform of a SSM of 230/100 ml for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fanual Park	

LOE ID:	28672
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	356
Number of Exceedances:	41
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 356 single samples were collected with 41 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID:	28665
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 356 single samples were collected with 15 samples correlated with a storm event. Four of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID:	77606
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	59
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Three of the 59 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Fanual Park.
Temporal Representation:	The samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID:	74343
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 60 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Fanuel Park site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Fanual Park**

LOE ID:	74344
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 60 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fanuel Park site.

Temporal Representation: Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID: 74345

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 68
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Mission Bay Shoreline, at Fanual Park to determine beneficial use support and results are as follows: 6 of 68 samples exceed the criterion for Coliform, Total.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan (Basin Plan 2011) states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Bay Shoreline, at Fanual Park was collected at 1 monitoring site [Fanuel Park]

Temporal Representation: Data was collected over the time period 4/2/2008-8/24/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID: 74346

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 60 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Fanuel Park site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fanual Park	

LOE ID:	30343
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Below is a copy of the 2006 LOE information for the data used to support the listing of Mission Bay Shoreline: Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters. Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Fanual Park' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing
Temporal Representation:	From 03/21/2000-10/30/2005.
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fanual Park	

LOE ID:	31163
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 297 dry month (April through October) single samples were collected with 59 dry month geomeans calculated. 6 of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fanual Park	

LOE ID:	31161
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Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 301 dry month (April through October) single samples were collected with 59 dry month geomeans calculated. 1 of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria
Mission Bay Shoreline, at Fanual Park

Region 9

LOE ID:	31162
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 250 dry month (April through October) single samples were collected with 51 dry month geomeans calculated. 1 of the 51 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanuel Park

LOE ID:	30112
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	48
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 48 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Fanuel Park in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID:	30785
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	337
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 352 single samples of which 337 are dry weather (AB411) samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Fanual Park**

LOE ID:	30532
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	300
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 300 dry weather (AB411) single samples were collected with 19 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Fanual Park**

LOE ID:	30548
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	341
Number of Exceedances:	37
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999

	through October 2007. A total of 356 single samples were collected of which 341 are dry weather (ABN411) samples with 37 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria
Mission Bay Shoreline, at Fanual Park

Region 9

LOE ID:	28735
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 352 single samples were collected with 15 samples correlated with a storm event. None of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanuel Park

LOE ID: 28731

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 352

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 352 single samples were collected with 2 samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Fanuel Park, San Diego, California. Station identification is MB-120.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID: 28651

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 15
Number of Exceedances: 7

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 352 single samples were collected with 15 samples correlated with a storm event. Seven of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Fanuel Park, San Diego, California. Station location ID is MB-120.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fanual Park

LOE ID:	28688
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 314 single samples were collected with 14 samples correlated with a storm event. Three of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Fanual Park**

LOE ID:	28689
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	314
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 314 single samples were collected with 22 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria
Mission Bay Shoreline, at Fanual Park

Region 9

LOE ID:	28654
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	352
Number of Exceedances:	68
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 352 single samples were collected with 68 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Fanuel Park, San Diego, California. Station identification number is MB-120.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria
Mission Bay Shoreline, at Fanual Park

Region 9

LOE ID: 28693

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 70

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 314 single samples were collected and 70 geomeans calculated. One of the 70 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria
Mission Bay Shoreline, at Fanual Park

Region 9

LOE ID: 28677

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 356 single samples were collected with 78 monthly geomeans calculated. Twelve of the 78 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44432, Indicator Bacteria
Mission Bay Shoreline, at Fanual Park

Region 9

LOE ID:	28743
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 352 single samples were collected with 78 monthly geomeans calculated. Two of the 78 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

[2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Fanuel Park, San Diego, California. Station identification number is MB-120.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Fiesta Island Bridge](#)
Water Body ID: CAC9071100020090422212550
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43617	Region 9
Mission Bay Shoreline, at Fiesta Island Bridge		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the new data for Enterococcus, one of the 65 samples exceeded the 30-day geomean criterion of 35 cfu/100 ml for enterococcus in marine water for REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the new data for Enterococcus, one of the 65 samples exceeded the 30-day geomean criterion of 35 cfu/100 ml for enterococcus in marine water for REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fiesta Island Bridge	

LOE ID:	31217
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 171 dry month (April through October) single samples were collected with 43 dry month geomeans calculated. None of the 43 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	28549
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	237
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 237 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml

Objective/Criterion Reference: (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID: 28553

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 14
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 206 single samples were collected with 14 samples correlated with a storm event. Three of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island Bridge

LOE ID: 28557

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 48
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 206 single samples were collected and 48 geomeans calculated. None of the 48 geomeans exceeded the geomean water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island Bridge

LOE ID: 30786

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	222
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 237 single samples were collected of which 222 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	31216
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 140 dry month (April through October) single samples were collected with 34 dry month geomeans calculated. None of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	31215
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 180 dry month (April through October) single samples were collected with 43 dry month geomeans calculated. 1 of the 43 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.

Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	30113
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were six beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange, March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Fiesta Island Bridge in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island Bridge

LOE ID:	30344
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	<p>Below is a copy of the 2006 LOE information for the data used to support the listing of Mission Bay Shoreline:</p> <p>Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).</p> <p>Placeholder reference 2006 303(d)</p>
Data Reference:	
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or</p> <p>(B) 10,000 total coliform bacteria per 100 milliliters; or</p> <p>(C) 400 fecal coliform bacteria per 100 milliliters; or</p> <p>(D) 104 enterococcus bacteria per 100 milliliters.</p> <p>Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters; or</p> <p>(B) 200 fecal coliform bacteria per 100 milliliters; or</p> <p>(C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	<p>In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Fiesta Island Bridge' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing</p> <p>From 03/21/2000-10/30/2005.</p>
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island Bridge

LOE ID:	28554
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	245
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 245 single samples were collected with 22 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	74350
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not

Objective/Criterion Reference: exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Fiesta Island Bridge site.
Temporal Representation: Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fiesta Island Bridge	

LOE ID: 74349

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Mission Bay Shoreline, at Fiesta Island Bridge to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Bay Shoreline, at Fiesta Island Bridge was collected at 1 monitoring site [Fiesta Island Bridge]
Temporal Representation: Data was collected over the time period 4/2/2008-9/23/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fiesta Island Bridge	

LOE ID: 74348

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island Bridge

LOE ID:	74347
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Fiesta Island Bridge site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island Bridge

LOE ID:	77607
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the twenty-one samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Fiesta Island Bridge.
Temporal Representation:	The samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Fiesta Island Bridge**

LOE ID:	28547
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	237
Number of Exceedances:	34
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 237 single samples were collected with 34 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island Bridge

LOE ID:	28548
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 237 single samples were collected with 15 samples correlated with a storm event. Four of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.

Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fiesta Island Bridge	

LOE ID:	28558
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 245 single samples were collected with 57 monthly geomeans calculated. Eight of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fiesta Island Bridge	

LOE ID:	30533
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 192 dry weather (AB411) single samples were collected with 12 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	30550
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	230
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 245 single samples were collected of which 230 are dry weather (AB411) samples with 16 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	28556
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 237 single samples were collected with 57 monthly geomeans calculated. None of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.

Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria
Mission Bay Shoreline, at Fiesta Island Bridge

Region 9

LOE ID:	28555
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 245 single samples were collected with 15 samples correlated with a storm event. Six of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Fiesta Island Bridge**

LOE ID:	28552
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	206
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 206 single samples were collected with 15 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43617, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Fiesta Island Bridge**

LOE ID:	28550
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 237 single samples were collected with 15 samples correlated with a storm event. None of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Fiesta Island Bridge, San Diego, California. Station identification number is MB-010.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Leisure Lagoon](#)
Water Body ID: CAC9064000020090422211717
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43805	Region 9
Mission Bay Shoreline, at Leisure Lagoon		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. One hundred and fifty six of the 570 samples exceed the WQO of a SSM of 230 / 100ml for total coliform for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred and fifty six of the 570 samples exceed the WQO of a SSM of 230 / 100ml for total coliform for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Leisure Lagoon	

LOE ID:	30534
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	330
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 330 dry weather (AB411) single samples were collected with 16 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria
Mission Bay Shoreline, at Leisure Lagoon

Region 9

LOE ID:	30551
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	376
Number of Exceedances:	31
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 394 single samples were collected of which 376 are dry weather (AB411) samples with 31 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

Objective/Criterion Reference:	2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria
Mission Bay Shoreline, at Leisure Lagoon

Region 9

LOE ID:	28599
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	73
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 348 single samples were collected and 73 geomeans calculated. One of the 73 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Leisure Lagoon

LOE ID:	28600
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	80
Number of Exceedances:	17
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 394 single samples were collected with 80 monthly geomeans calculated. Seventeen of the 80 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Leisure Lagoon**

LOE ID:	28589
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	392
Number of Exceedances:	114
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 392 single samples were collected with 114 samples

Data Reference:	exceeded the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria
Mission Bay Shoreline, at Leisure Lagoon

Region 9

LOE ID:	28590
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	18
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 391 single samples were collected with 18 samples correlated with a storm event. Twelve of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Leisure Lagoon	

LOE ID:	28591
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	391
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 391 single samples were collected with nine samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria	Region 9
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Mission Bay Shoreline, at Leisure Lagoon

LOE ID:	28598
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	80
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 391 single samples were collected with 80 monthly geomeans calculated. Three of the 80 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Leisure Lagoon**

LOE ID:	31218
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 299 dry month (April through October) single samples were

	collected with 60 dry month geomeans calculated. 6 of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Leisure Lagoon

LOE ID:	31219
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 254 dry month (April through October) single samples were collected with 52 dry month geomeans calculated. 1 of the 52 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Leisure Lagoon	

LOE ID:	31220
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 297 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 2 of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Leisure Lagoon	

LOE ID:	30115
Pollutant:	Indicator Bacteria

LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	68
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 68 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Leisure Lagoon in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria
Mission Bay Shoreline, at Leisure Lagoon

Region 9

LOE ID:	28592
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	3

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 391 single samples were collected with 18 samples correlated with a storm event. Three of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Leisure Lagoon	

LOE ID:	28593
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	348
Number of Exceedances:	23
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 348 single samples were collected with 23 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Leisure Lagoon

LOE ID:	28594
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 348 single samples were collected with 18 samples correlated with a storm event. Seven of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Leisure Lagoon

LOE ID:

28595

Pollutant:

Enterococcus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

394

Number of Exceedances:

42

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 394 single samples were collected with 42 samples exceeding the single sample water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.

Temporal Representation:

Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Mission Bay Shoreline, at Leisure Lagoon

LOE ID:	28596
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 394 single samples were collected with 18 samples correlated with a storm event. Eleven of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Mission Bay Shoreline, at Leisure Lagoon

LOE ID: 74352

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	186
Number of Exceedances:	44
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Leisure Lagoon to determine beneficial use support and results are as follows: 44 of 186 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Leisure Lagoon was collected at 2 monitoring sites [Leisure Lagoon swim area, Leisure Lagoon drain] The data for these two stations were averaged when sampled on the same day. The stations are within 200 meters.
Temporal Representation:	Data was collected over the time period 1/13/2005-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Leisure Lagoon

LOE ID:	74353
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	178
Number of Exceedances:	42
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Leisure Lagoon to determine beneficial use support and results are as follows: 42 of 178 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Bay Shoreline, at Leisure Lagoon was collected at 1 monitoring site [MB-053]
Temporal Representation: Data was collected over the time period 5/3/2005-8/24/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria
Mission Bay Shoreline, at Leisure Lagoon

Region 9

LOE ID: 30787

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 373
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 391 single samples were collected of which 373 are dry weather (AB411) samples with six samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Leisure Lagoon near storm drain, San Diego, California. Station identification number is MB-050.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43805, Indicator Bacteria
Mission Bay Shoreline, at Leisure Lagoon

Region 9

LOE ID: 30346

Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Below is a copy of the 2006 LOE information for the data used to support the listing of Mission Bay Shoreline: Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters. Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Leisure Lagoon' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing
Temporal Representation:	From 03/21/2000-10/30/2005.
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at North Crown Point](#)
Water Body ID: CAC9064000020090422205921
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43882	Region 9
Mission Bay Shoreline, at North Crown Point		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 and 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. With the latest information, 12 of the 121 samples exceed the Water Quality Criteria for enterococcus of a geomean of 35 cfu/100 ml for REC-1 in AB411 period, and 63 out of 380 exceed the WQ criteria for total coliform of a geomean of 70 cfu/ 100 ml for SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest information, 12 of the 121 samples exceed the Water Quality Objective (WQO) for enterococcus of a geomean of 35 cfu/100 ml for REC-1 in AB411 period, and 63 out of 380 exceed the WQO for total coliform of a geomean of 70 cfu/ 100 ml for SHELL and this exceeds the allowable frequency listed in Table 4.2 and under section 4.3 (for AB 411 period) of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria	Region 9
Mission Bay Shoreline, at North Crown Point	

LOE ID: 31222
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 295 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 9 of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID:	28657
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 312 single samples were collected with 20 samples correlated with a storm event. Ten of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria	Region 9
Mission Bay Shoreline, at North Crown Point	

LOE ID:	30552
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	292
Number of Exceedances:	27
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 312 single samples were collected of which 292 are dry weather (AB411) samples with 27 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.

Temporal Representation: Samples were collected from January 1999 through October 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID: 31224

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 291 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 1 of the 60 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from N. Crown Point, San Diego, California. Station identification number is MB-090.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID:	31223
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 250 dry month (April through October) single samples were collected with 51 dry month geomeans calculated. 1 of the 51 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria**Region 9****Mission Bay Shoreline, at North Crown Point**

LOE ID:	30536
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	249
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 249 dry weather (AB411) single samples were collected

Data Reference:	with 14 samples exceeding the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID:	74358
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 61 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Wildlife Refuge fence site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria**Region 9****Mission Bay Shoreline, at North Crown Point**

LOE ID:	74357
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	70
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at North Crown Point to determine beneficial use support and results are as follows: 2 of 70 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at North Crown Point was collected at 1 monitoring site [Wildlife Refuge fence]
Temporal Representation:	Data was collected over the time period April 2008 to August 2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria**Region 9****Mission Bay Shoreline, at North Crown Point**

LOE ID:	74356
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 61 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Wildlife Refuge fence site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria	Region 9
Mission Bay Shoreline, at North Crown Point	

LOE ID:	74355
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 61 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Wildlife Refuge fence site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria	Region 9
Mission Bay Shoreline, at North Crown Point	

LOE ID:	30347
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Below is a copy of the 2006 LOE information for the data used to support the listing of Mission Bay Shoreline:
	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or</p> <p>(B) 10,000 total coliform bacteria per 100 milliliters; or</p> <p>(C) 400 fecal coliform bacteria per 100 milliliters; or</p> <p>(D) 104 enterococcus bacteria per 100 milliliters.</p> <p>Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters; or</p> <p>(B) 200 fecal coliform bacteria per 100 milliliters; or</p> <p>(C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at North Crown Point' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing
Temporal Representation:	From 03/21/2000-10/30/2005.
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID:	28730
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999

through October 2006. A total of 310 single samples were collected with 19 samples correlated with a storm event. Two of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from N. Crown Point, San Diego, California. Station identification number is MB-090.

Temporal Representation: Samples were collected from January 1999 through October 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID: 77610

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 60
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: None of the sixty samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Mission Bay Shoreline, at North Crown Point (wildlife refuge fence)
Temporal Representation: The samples were collected from April 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID: 28744

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 69
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 312 single samples were collected with 69 monthly geomeans calculated. Two of the 69 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from N. Crown Point, San Diego, California. Station identification number is MB-090.
Temporal Representation: Samples were collected from January 1999 through October 2006.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID: 28681

Pollutant: Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	269
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 269 single samples were collected with 19 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria
Mission Bay Shoreline, at North Crown Point

Region 9

LOE ID:	28680
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 269 single samples were collected with 20 samples correlated with a storm event. Of the 20 samples, five exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria
Mission Bay Shoreline, at North Crown Point

Region 9

LOE ID:	28661
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	312
Number of Exceedances:	37
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 312 single samples were collected with 37 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.

Temporal Representation:

Samples were collected from January 1999 through October 2006.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID: 30120

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: -N/A

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 66

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 66 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [County of Orange, March 2007, Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at North Crown Point in Mission Bay.

Temporal Representation:

The beach advisory covers the time frame of January 2001 -December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID: 28642

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 19
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 310 single samples were collected with 19 samples correlated with a storm event. Eleven of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from N. Crown Point, San Diego, California. Station location ID is MB-090.

Temporal Representation: Samples were collected from January 1999 through October 2006.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria
Mission Bay Shoreline, at North Crown Point

Region 9

LOE ID:	28641
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	310
Number of Exceedances:	61
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 310 single samples were collected with 61 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at N. Crown Point, San Diego, California. Station identification number is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria
Mission Bay Shoreline, at North Crown Point

Region 9

LOE ID:	28694
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 269 single samples were collected and 60 geomeans

Data Reference:	calculated. Three of the 60 geomeans exceeded the geomean water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Crown Point

LOE ID:	28664
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	69
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 312 single samples were collected with 69 monthly geomeans calculated. Fifteen of the 69 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. The monitoring station identification number is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria	Region 9
Mission Bay Shoreline, at North Crown Point	

LOE ID:	28729
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	310
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 310 single samples were collected with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. Station identification is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43882, Indicator Bacteria	Region 9
Mission Bay Shoreline, at North Crown Point	

LOE ID:	30788
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	291
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2006. A total of 310 single samples were collected of which 291 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from N. Crown Point, San Diego, California. Station identification is MB-090.
Temporal Representation:	Samples were collected from January 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Sail Bay](#)
Water Body ID: CAC9075100020090422204352
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44258	Region 9
Mission Bay Shoreline, at Sail Bay		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest information, 29 of the 277 samples exceeded the WQO for total coliform of a single sample maximum of 230 cfu/100 ml for SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 29 of the 277 samples exceeded the WQO for total coliform of a single sample maximum of 230 cfu/100 ml for SHELL and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Sail Bay	

LOE ID: 28645
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting

Number of Samples:	14
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 245 single samples were collected with 14 samples correlated with a storm event. Eight of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	28732
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 245 single samples were collected with 58 monthly geomeans calculated. None of the 58 geomeans exceeded the geomean water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Sail Bay

LOE ID:	74361
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Sail Bay to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Sail Bay was collected at 2 monitoring sites [Santa Clara Cove, S end, Whiting Ct Catamaran]
Temporal Representation:	Data was collected over the time period 1/17/2008-9/23/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	74360
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 23 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sail Bay site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	74359
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 23 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not

Objective/Criterion Reference: exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at the Sail Bay site.
 Temporal Representation: Samples were collected approximately once a week from January 2008 to September 2008.
 Environmental Conditions:
 QAPP Information: The samples were collected for the Beach Watch program.
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria **Region 9**
Mission Bay Shoreline, at Sail Bay

LOE ID: 28692

Pollutant: Fecal Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 50
 Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
 Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 205 single samples were collected and 50 geomeans calculated. None of the 50 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
 Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
 Temporal Representation: Samples were collected from January 1999 through December 2007.
 Environmental Conditions:
 QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
 QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria **Region 9**
Mission Bay Shoreline, at Sail Bay

LOE ID: 28741

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 245 single samples were collected with 14 samples correlated with a storm event. None of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	30553
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	232
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 246 single samples were collected of which 232 are dry weather (AB411) samples with 13 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	30789
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	231
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 245 single samples were collected of which 231 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	77611
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the twenty-three samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Sail Bay at stations Sail Bay and Santa Clara Pl., north side.
Temporal Representation:	The samples were collected from January 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	28653
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	245
Number of Exceedances:	29
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 245 single samples were collected with 29 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Sail Bay

LOE ID:	31230
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 180 dry month (April through October) single samples were collected with X45 dry month geomeans calculated. 2 of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Sail Bay

LOE ID:	28690
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	205
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 205 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID: 30537

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 192
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 192 dry weather (AB411) single samples were collected with 4 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID: 28660

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 246

Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 246 single samples were collected with 15 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	28659
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 246 single samples were collected with 14 samples correlated with a storm event. Two of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay

Region 9

LOE ID:	30142
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 11 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange, March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-

contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information:

Bacteriological monitoring samples were collected at Sail Bay in Mission Bay.

The beach advisory covers the time frame of January 2001 -December 2007.

QAPP Information Reference(s):

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Sail Bay

LOE ID:

28666

Pollutant:

Enterococcus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

58

Number of Exceedances:

4

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 246 single samples were collected with 58 monthly geomeans calculated. Four of the 58 geomeans exceeded the geomean water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Mission Bay Shoreline, at Sail Bay

LOE ID:	28679
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 205 single samples were collected with 13 samples correlated with a storm event. Three of the 13 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Mission Bay Shoreline, at Sail Bay

LOE ID:	30348
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Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Below is a copy of the 2006 LOE information for the data used to support the listing of Mission Bay Shoreline:
	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or</p> <p>(B) 10,000 total coliform bacteria per 100 milliliters; or</p> <p>(C) 400 fecal coliform bacteria per 100 milliliters; or</p> <p>(D) 104 enterococcus bacteria per 100 milliliters.</p> <p>Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters; or</p> <p>(B) 200 fecal coliform bacteria per 100 milliliters; or</p> <p>(C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Sail Bay' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing
Temporal Representation:	From 03/21/2000-10/30/2005.
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Sail Bay

LOE ID:	31232
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 179 dry month (April through October) single samples were collected with 45 dry month geomeans calculated. None of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Sail Bay

LOE ID:	31231
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 139 dry month (April through October) single samples were collected with X dry month geomeans calculated. None of the 37 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Sail Bay

LOE ID:	28733
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	245
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 245 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Sail Bay, San Diego, California. Station identification number is MB-130.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance

**Line of Evidence (LOE) for Decision ID 44258, Indicator Bacteria
Mission Bay Shoreline, at Sail Bay**

Region 9

LOE ID:	74362
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 23 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Sail Bay site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Visitors Center](#)
Water Body ID: CAC9064000020090422211309
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43959	Region 9
Mission Bay Shoreline, at Visitors Center		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Two hundred and seventeen of the 666] samples exceed the Water Quality Objective for Total Coliform of a SSM of 230 cfu/100 ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two hundred and seventeen of the 666] samples exceed the Water Quality Objective for Total Coliform of a SSM of 230 cfu/100 ml for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Visitors Center	

LOE ID:	31242
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	20
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 359 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 20 of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID:	31244
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 356 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 3 of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID:	31243
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 315 dry month (April through October) single samples were collected with 52 dry month geomeans calculated. One of the 52 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Mission Bay Shoreline, at Visitors Center

LOE ID:	30350
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Below is a copy of the 2006 LOE information for the data used to support the listing of Mission Bay Shoreline: Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters. Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Visitors Center' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing
Temporal Representation:	From 03/21/2000-10/30/2005.
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, San Diego County Health Dept.
QAPP Information Reference(s):	

LOE ID:	74382
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	88
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Mission Bay Shoreline, at Visitors Center to determine beneficial use support and results are as follows: 8 of 88 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Visitors Center was collected at 1 monitoring site [drain S of Visitor's Cntr]
Temporal Representation:	Data was collected over the time period 1/9/2008-8/31/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID:	28585
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 528 single samples were collected with 81 monthly geomeans calculated. Seven of the 81 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID:	28584
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 490 single samples were collected with 18 samples correlated with a storm event. Ten of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID: 28583

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 490
Number of Exceedances: 117

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 490 single samples were collected with 117 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID: 28582

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	17
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 445 single samples were collected with 17 samples correlated with a storm event. Seven of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID:	28588
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	37
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 490 single samples were collected with 81 monthly geomeans calculated. Thirty seven of the 81 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Visitors Center

LOE ID:	28586
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	74
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 445 single samples were collected and 74 geomeans calculated. Four of the 74 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID: 28581

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 445
Number of Exceedances: 79

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 445 single samples were collected with 79 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID: 28578

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	17
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 528 single samples were collected with 17 samples correlated with a storm event. Twelve of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria
Mission Bay Shoreline, at Visitors Center

Region 9

LOE ID:	28576
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	528
Number of Exceedances:	209
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 528 single samples were collected with 209 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Visitors Center

LOE ID: 28580

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 17
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 528 single samples were collected with 17 samples correlated with a storm event. Three of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach

monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Visitors Center

LOE ID: 28579

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 528
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 528 single samples were collected with 11 samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Visitors Center

LOE ID: 30555

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	472
Number of Exceedances:	107
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 490 single samples were collected of which 472 are dry weather (AB411) samples with 107 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Visitors Center

LOE ID:	30539
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	428
Number of Exceedances:	72
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 428 dry weather (AB411) single samples were collected with 72 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Visitors Center

LOE ID:	30791
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	511
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 528 single samples were collected of which 511 are dry weather (AB411) samples with eight samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Visitor's Center near storm drain, San Diego, California. Station identification number is MB-060.
Temporal Representation:	Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43959, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Visitors Center

LOE ID: 30158

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: -N/A

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 477

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 477 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards.

Data Reference:

[County of Orange, March 2007. Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at the Visitors Center in Mission Bay.

Temporal Representation:

The beach advisory covers the time frame of January 2001 -December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach](#)
Water Body ID: CAC9063000020090422160501
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44415	Region 9
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 40 of 280 samples exceed the water quality objective for total coliform of a single sample maximum of 230/100ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 40 of 280 samples exceed the water quality objective for total coliform of a single sample maximum of 230/100ml for the protection of SHELL beneficial use and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach	

LOE ID: 75095
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 56 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Avenida de la Playa at La Jolla Shores Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID:	75096
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 56 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Avenida de la Playa at La Jolla Shores Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID:	75097
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	67
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach to determine beneficial use support and results are as follows: 1 of 67 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach was collected at 1 monitoring site [La Jolla Shores Beach (FM-080)]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/25/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach**

LOE ID:	75098
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 52 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Avenida de la Playa at La Jolla Shores Beach site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 77675

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 52
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Zero of the 52 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach.
Temporal Representation: The samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 29153

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	216
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 216 single samples were collected with 9 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID:	29154
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 213 single samples were collected with 49 geomeans calculated. From the 49 geomeans, none exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.

Temporal Representation:

Samples were collected from January 1999 through December 2003.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 29177

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: -N/A

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 23

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 23 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Bacteriological monitoring samples were collected at at Avenida de la Playa at La Jolla

Shores Beach, La Jolla, California.
Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:
QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 29148
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 213
Number of Exceedances: 39
Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 213 single samples were collected with 39 samples exceeding the single sample water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: From the California Ocean Plan the median coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation: Samples were collected from January 1999 through December 2003.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 29149
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting

Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 213 single samples were collected with 9 correlated with a storm event. Seven of the 9 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the California Ocean Plan the median coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach		
LOE ID:	29150	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	213	
Number of Exceedances:	2	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 213 single samples were collected with two samples exceeding the single sample water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,	

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean:Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID:	29151
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 213 single samples were collected with 49 monthly geomeans calculated. From the 49 geomeans, only one exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean:Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID:	29152
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 213 single samples were collected with 9 samples correlated with a storm event. From the 9 samples, none exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 29155

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 11
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2006. A total of 216 single samples were collected with 11 samples correlated with a storm event. From the 11 samples, one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml.

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.

Temporal Representation: Samples were collected from January 1999 through December 2003.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID:	29156
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	202
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 202 single samples were collected with 22 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach	

LOE ID:	29157
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	46
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2006. A total of 202 single samples were collected with 46 monthly geomeans were calculated. From the 46 geomeans, five exceeded the geomean water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach	

LOE ID:	29158
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 202 single samples were collected with 10 samples correlated with a storm event. From the 10 samples, four exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.

Temporal Representation:

Samples were collected from January 1999 through December 2003.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 30652

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 192
Number of Exceedances: 18

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 202 single samples were collected of which 192 are dry weather (AB411) samples with 18 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.

Temporal Representation:

Samples were collected from January 1999 through December 2003.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach**

LOE ID:	30751
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	205
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 216 single samples were collected of which 205 are dry weather (AB411) samples with eight samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml. Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach**

LOE ID:	31181
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	4

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 253 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. Four of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FM-080.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach	

LOE ID:	31182
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 215 dry month (April through October) single samples were collected with 53 dry month geomeans calculated. None of the 53 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml. Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FM-080.

Temporal Representation: Samples were collected from April 1999 through October 2003.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID: 31183

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 57

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 252 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. One of the 57 geomeans exceeded the geomean water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FM-080.

Temporal Representation: Samples were collected from April 1999 through October 2003.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44415, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach

LOE ID:	30858
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	204
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2003. A total of 213 single samples were collected of which 204 are dry weather (AB411) samples and two of those samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Avenida de la Playa at La Jolla Shores Beach, La Jolla, California. Station identification number is FH-080.
Temporal Representation:	Samples were collected from January 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach](#)
Water Body ID: CAC9063000020090422165246
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44329	Region 9
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 1 of 47 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 1 of 47 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach	

LOE ID:	75108
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 6 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bonair St at Windansea Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID:	31180
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through September 2007. A total of 89 dry month (April through October) single samples were collected with 29 dry month geomeans calculated. None of the 29 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. Station identification number is FM-050.
Temporal Representation:	Samples were collected from April 1999 through September 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID: 75105

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 6 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Bonair St at Windansea Beach site.
Temporal Representation: Samples were collected from January 2008 to August 2008.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID: 75106

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 6 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Bonair St at Windansea Beach site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID: 75107

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 10

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach was collected at 1 monitoring site [Bonair]

Temporal Representation: Data was collected over the time period 1/22/2008-8/27/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID: 30859

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	136
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected of which 136 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. Station identification is FM-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID:	31178
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through September 2007. A total of 90 dry month (April through October) single samples were collected with 30 dry month geomeans calculated. None of the 30 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FM-050.
Temporal Representation:	Samples were collected from April 1999 through September 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID:	31179
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through September 2007. A total of 90 dry month (April through October) single samples were collected with 30 dry month geomeans calculated. None of the 30 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FM-050.
Temporal Representation:	Samples were collected from April 1999 through September 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID:	28872
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected with nine samples correlated with a storm event. Three of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. Station location ID is FM-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID:	28869
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	145
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected with 13 exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. Station identification number is FM-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID:	28873
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. Station identification is FM-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID:	28875
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected with 43 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. Station identification number is FM-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID: 28876

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected with nine samples correlated with a storm event. None of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bonair St at Windansea Beach, San Diego, California. Station identification number is FM-050.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID:	28882
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 134 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach	

LOE ID:	28883
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 134 single samples were collected with 41 monthly geomeans calculated. One of the 41 geomeans exceeded the geomean water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID:	28884
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 134 single samples were collected with 8 samples correlated with a storm event. None of the 8 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected from Bonair/Windansea Beach, San Diego, California. The monitoring station identification number is FM-050.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID: 30653

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 126
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 134 single samples were collected of which 126 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance](#)

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach**Region 9**

LOE ID:	77677
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the six samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach
Temporal Representation:	The samples were collected from January 2008 to August 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach**Region 9**

LOE ID:	28885
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have

exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.

Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID: 28878

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 145
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected with four samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

LOE ID:	30752
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected of which 137 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID:	28880
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected and 44 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44329, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach

Region 9

LOE ID:	28881
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 145 single samples were collected with eight samples correlated with a storm event. Among the eight samples only one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bonair St at Windansea Beach, San Diego, California. The monitoring station identification number is FH-050.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Crystal Pier](#)
Water Body ID: CAC9063000020090422171553
Water Body Type: Coastal & Bay Shoreline

DECISION ID	45603	Region 9
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of 84 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of 84 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier	

LOE ID:	29185
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	263

Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 263 single samples were collected with 8 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	30655
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	256
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 263 single samples were collected of which 256 are dry weather (AB411) samples with eight samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID: 29184

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 240 single samples were collected with 7 samples correlated with a storm event. None of the 7 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:

[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the

full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID: 31173

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 233 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. One of the 60 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID: 30755

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	233
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 240 single samples were collected of which 233 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	75123
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 21 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Crystal Pier site.

Temporal Representation:

Samples were collected from April 2008 to September 2008.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID: 75122

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 24

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Crystal Pier to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Crystal Pier was collected at 1 monitoring site [Crystal Pier]

Temporal Representation:

Data was collected over the time period 4/14/2008-9/30/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID: 75121

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 21 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Crystal Pier site.
Temporal Representation:	Samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	75120
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 21 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Crystal Pier site.
Temporal Representation:	Samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID:	29183
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	240
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 240 single samples were collected with 5 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Crystal Pier**

LOE ID:	29182
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 276 single samples were collected with 8 samples correlated with a storm event. None of the 8 samples exceeded the single sample water

Data Reference:	quality objective. National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	29181
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	276
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 276 single samples were collected with zero sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	31175
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 234 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance

**Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier****Region 9**

LOE ID:	31174
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 199 dry month (April through October) single samples were collected with 50 dry month geomeans calculated. None of the 50 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier****Region 9**

LOE ID:	30862
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	268
Number of Exceedances:	0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 276 single samples were collected of which 268 are dry weather (AB411) samples with zero sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	29180
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 276 single samples were collected with 8 samples correlated with a storm event. Four of the 8 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID:	77679
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 21 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Crystal Pier.
Temporal Representation:	The samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	29179
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	276
Number of Exceedances:	24
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 276 single samples were collected with 24 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

Region 9

LOE ID:	29189
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 263 single samples were collected with 63 monthly geomeans calculated. One of the 63 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier**

Region 9

LOE ID:	29186
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 263 single samples were collected with 7 samples correlated with a storm event. None of the 7 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier		
LOE ID:	29187	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	66	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 276 single samples were collected with 66 monthly geomeans calculated. None of the 66 geomeans exceeded the geomean water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).	
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.	
Temporal Representation:	Samples were collected from January 1999 through December 2007.	

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID: 29188

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 59
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 240 single samples were collected and 59 geomeans calculated. None of the 59 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Crystal Pier, San Diego, California. Station identification number is FM-020.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 45603, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Crystal Pier

LOE ID: 29269

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	2555
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were five beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California.
Temporal Representation:	The beach closures covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

DECISION ID	50008	Region 9
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier		
Pollutant:	Trash	
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Source Unknown	
Expected Attainment Date:	2029	
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of	

the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: The total weight of trash (lbs) collected on 6/23/07, 6/28/08, 6/27/09, and 6/26/10 was 1,277.15. However, using the metric, Coastkeeper classified this water body as medium for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 50008, Trash
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier**

Region 9

LOE ID:	75138
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this 6/23/07, 6/28/08, 6/27/09, and 6/26/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,277.15. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Pacific Beach - Crystal Pier.
Temporal Representation:	Four cleanups occurred on 6/23/07, 6/28/08, 6/27/09, and 6/26/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach](#)
Water Body ID: CAC9063000020090422155450
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44298 **Region 9**
Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, five of 187 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, five of 187 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID: 29168
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 65

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 188 single samples were collected with 65 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID:	29167
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 189 single samples were collected with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID: 29160

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 7

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through December 2006. A total of 185 single samples were collected with 7 samples correlated with a storm event. Two of the 7 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the California Ocean Plan the median coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff

because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID: 30863

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 178
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 185 single samples were collected of which 178 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100 ml;
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID: 31172

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 141 dry month (April through October) single samples were collected with 48 dry month geomeans calculated. None of the 48 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100 ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID:	31171
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 144 dry month (April through October) single samples were collected with 50 dry month geomeans calculated. One of the 50 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID:	31170
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through October 2007. A total of 144 dry month (April through October) single samples were collected with 50 dry month geomeans calculated. None of the 50 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach**

LOE ID:	75139
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach was collected at 1 monitoring site [El Paseo Grande (NR)]
Temporal Representation:	Data was collected over the time period 1/8/2008-7/2/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach**

LOE ID:	29166
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 188 single samples were collected with six samples correlated with a storm event. None of the six samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach	

LOE ID:	29165
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	65
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 188 single samples were collected with 65 monthly geomeans calculated. None of the geomean exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID: 29164

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 188

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 188 single samples were collected with two samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID:	29163
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 185 single samples were collected with seven samples correlated with a storm event. One of the seven samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100 ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID:	29162
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 185 single samples were collected with 63 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100 ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID:	29178
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the

Data Reference:	bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California.
Temporal Representation:	The beach closures advisory the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach	

LOE ID:	30756
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 188 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID: 29161

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 185

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 185 single samples were collected with two sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100 ml;

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation: Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID: 29159

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	185
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 185 single samples were collected with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the California Ocean Plan the median coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach

LOE ID:	29169
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 189 single samples were collected with 7 samples correlated with a storm event. Two of the 7 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.
Temporal Representation:	Samples were collected from May 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44298, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach	

LOE ID:	30656
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	182
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 1999 through December 2007. A total of 189 single samples were collected of which 182 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at El Paseo Grande at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-340.

Temporal Representation:

Samples were collected from May 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach](#)
Water Body ID: CAC9063000020090422172100
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44290 **Region 9**
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 3 of 93 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 3 of 93 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID: 29113
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 74

Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 274 single samples were collected with 74 monthly geomeans calculated. Three of the 74 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID:	29135
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 274 single samples were collected with 6 samples correlated with a storm event. One of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

Objective/Criterion Reference:	2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach		
LOE ID:	29174	
Pollutant:	Indicator Bacteria	
LOE Subgroup:	Health Advisories	
Matrix:	-N/A	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	2555	
Number of Exceedances:	5	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were five beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.	
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.	
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.	
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-	

contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at Grand avenue, Pacific Beach, California.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID: 29104

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 273
Number of Exceedances: 10

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 273 single samples were collected with 10 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID:	29105
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 273 single samples were collected with six samples correlated with a storm event. None of the six samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach**

LOE ID:	29106
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	273
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 273 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID:	29112
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	274
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 274 single samples were collected with 4 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach	

LOE ID: 29134

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 273 single samples with 6 samples correlated with a storm event. None of 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID: 29107

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 74
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 273 single samples were collected with 74 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID: 29109

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	253
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 253 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID:	29110
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	73
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 253 single samples were collected with 73 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach	

LOE ID:	29111
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 253 single samples were collected with five samples correlated with a storm event. None of the five samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event

was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID: 30757

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 248
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 253 single samples were collected of which 248 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml;

Objective/Criterion Reference: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID: 30657

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	268
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 274 single samples were collected of which 268 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID:	31168
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 226 dry month (April through October) single samples were collected with 59 dry month geomeans calculated. None of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach	

LOE ID:	30864
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	267
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 273 single samples were collected of which 267 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID: 31169

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 246 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID: 31167

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 247 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Grand avenue, Pacific Beach, California. Station identification number is EH-250.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID:	75140
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 19 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at the Grand Ave Pacific Beach site.
Temporal Representation: Samples were collected from April 2008 to September 2008.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID: 75141

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 19 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Grand Ave Pacific Beach site.
Temporal Representation: Samples were collected from April 2008 to September 2008.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

Region 9

LOE ID: 75142

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 22
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Grand Ave,

Pacific Beach to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach was collected at 1 monitoring site [Grand Ave.]

Temporal Representation: Data was collected over the time period 4/14/2008-9/22/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID: 75143

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 19 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Grand Ave Pacific Beach site.

Temporal Representation: Samples were collected from April 2008 to September 2008.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44290, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach

LOE ID: 77680

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the nineteen samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach.
Temporal Representation:	The samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove](#)
Water Body ID: CAC9063000020090422162520
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44420	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 55 of 374 samples exceed the water quality objective for total coliform of a single sample maximum of 230/100ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 55 of 374 samples exceed the water quality objective for total coliform of a single sample maximum of 230/100ml and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID:	31164
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 251 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. One of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	31166
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 251 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	30658
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	271
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 280 single samples were collected of which 271 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006](#)

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID: 30758

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 243
Number of Exceedances: 8

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 252 single samples were collected of which 243 are dry weather (AB411) samples with eight samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006](#)

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID: 30865

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	282
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 292 single samples were collected of which 282 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	29255
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 280 single samples were collected with 63 monthly geomeans calculated. One of the 63 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID: 29254

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 59
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 252 single samples were collected and 59 geomeans calculated. None of the 59 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID:	29253
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 292 single samples were collected with 66 monthly geomeans calculated. None of the 66 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove**

LOE ID:	29250
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 252 single samples were collected with nine samples

correlated with a storm event. One of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID: 29249

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 252
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 252 single samples were collected with 9 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	29248
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 292 single samples were collected with 10 samples correlated with a storm event. One of the 10 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.

Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID:	29247
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	292
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 292 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID:	29252
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 280 single samples were collected with nine samples correlated with a storm event. None of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	29251
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	280
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 280 single samples were collected with 5 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	75206
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 67 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the La Jolla Cove site.

Temporal Representation: Samples were collected from April 2008 to September 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID: 29246

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 9

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 292 single samples were collected with nine samples correlated with a storm event. Two of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID: 29226

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 292
Number of Exceedances: 51

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 292 single samples were collected with 51 samples exceeded the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at La Jolla Cove, San Diego, California. Station identification number is FM-070.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID: 29277

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were nine beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at La Jolla Cove in La Jolla, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	77681
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	67
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Four of the 67 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for

human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected at Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove.

Temporal Representation:

The samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID: 75180

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 67
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 67 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the La Jolla Cove site.

Temporal Representation:

Samples were collected from April 2008 to September 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID: 75179

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	67
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 67 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the La Jolla Cove site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID:	75205
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	82
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove to determine beneficial use support and results are as follows: 4 of 82 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove was collected at 1 monitoring site [La Jolla Cove]
Temporal Representation:	Data was collected over the time period 4/14/2008-8/25/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 44420, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove
Region 9

LOE ID:	31165
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 211 dry month (April through October) single samples were collected with 50 dry month geomeans calculated. None of the 50 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from La Jolla Cove, San Diego, California. Station identification number is FM-070.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

DECISION ID 50011
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove
Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Evaluation Guideline for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50011, Arsenic
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove**

Region 9

LOE ID:	75158
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)
[Air Toxics Hotspots Program Risk Assessment Guidelines, Part II Technical Support Document for Describing Available Cancer Potency Values.](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 1/22/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	50012	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50012, Cadmium	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID: 75159

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50013	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 50013, Chlordane
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Region 9

LOE ID:	75160
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate

Guideline Reference:	<p>of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)</p> <p>Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment</p> <p>Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene</p>
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	<p>Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program</p> <p>Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/</p>
QAPP Information Reference(s):	

DECISION ID	50014	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50014, Chlorpyrifos	Region 9
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Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID:	75169
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID

50015

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Pollutant:

Dieldrin

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dieldrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50015, Dieldrin
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove**

Region 9

LOE ID: 75170

Pollutant: Dieldrin
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50016 Region 9	
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Endosulfan Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endosulfan.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Endosulfan and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50016, Endosulfan
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove**

Region 9

LOE ID:	75171
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID

50017

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50017, Endrin

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID: 75178

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type: Shellfish surveys

Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s)

Objective/Criterion Reference:	that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50018	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Heptachlor epoxide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Heptachlor epoxide.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Heptachlor epoxide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50018, Heptachlor epoxide
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove**

Region 9

LOE ID:	75181
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/

DECISION ID	50019	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant: Hexachlorobenzene/ HCB
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hexachlorobenzene/ HCB.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Hexachlorobenzene/ HCB and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50019, Hexachlorobenzene/ HCB	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID: 75190
Pollutant: Hexachlorobenzene/ HCB
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish
Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50020	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50020, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID:	75191
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on

1/22/2008

Environmental Conditions:

QAPP Information:

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	50021	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mercury.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50021, Mercury	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID:	75192
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50022	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mirex.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mirex and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50022, Mirex
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove**

Region 9

LOE ID:	75198
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on

1/22/2008

Environmental Conditions:

QAPP Information:

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	50023	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50023, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID:	75199
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50024	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PCBs (Polychlorinated biphenyls).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PCBs (Polychlorinated biphenyls) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50024, PCBs (Polychlorinated biphenyls)
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove**

Region 9

LOE ID:	75200
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50025	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50025, Selenium	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove	

LOE ID: 75204

Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50026	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50026, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove

LOE ID:	75207
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999;

Guideline Reference:	<p>Klasing, S., and R. Brodberg, 2008)</p> <p>Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment</p> <p>Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene</p>
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site LJLJ
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/22/2008
Environmental Conditions:	
QAPP Information:	<p>Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program</p> <p>Additional background information can be found at:</p> <p>http://ccma.nos.noaa.gov/stressors/pollution/nsandt/</p>
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach](#)
Water Body ID: CAC9063000020090422171057
Water Body Type: Coastal & Bay Shoreline

DECISION ID	42716	Region 9
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 44 of 149 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1 beneficial use, and 160 of 504 samples exceed the SSM WQO for total coliform for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 44 of 149 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1 beneficial use, and 160 of 504 samples exceed the SSM WQO for total coliform for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach	

LOE ID: 77682

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	64
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Six of the 64 samples exceeded the objective of 70 mpr/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	75217
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	65
Number of Exceedances:	14
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fourteen of the 65 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the Pacific Beach Point site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

Region 9

LOE ID:	75218
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 63 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Pacific Beach Point site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

Region 9

LOE ID:	75219
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	74
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach to determine beneficial use support and results are as follows: 4

of 74 samples exceed the criterion for Coliform, Total.
[Data for Region 9 Beach Watch.](#)

Data Reference:

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach was collected at 1 monitoring site [P.B. Point]

Temporal Representation: Data was collected over the time period 1/14/2008-8/25/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID: 75220

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 64

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 64 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the pacific Beach Point site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID: 30866

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	419
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 430 single samples were collected of which 419 are dry weather (AB411) samples with 10 of those samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	31138
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	35
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 381 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. Thirty-five of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	31139
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 344 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. Seven of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID: 31140

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 342 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. Three of the 60 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID: 30759

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	443
Number of Exceedances:	66
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 454 single samples were collected of which 443 are dry weather (AB411) samples with 66 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	30659
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	479
Number of Exceedances:	125
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 491 single samples were collected of which 479 are dry weather (AB411) samples with 125 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

Objective/Criterion Reference:	2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach	

LOE ID:	29098
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	454
Number of Exceedances:	66
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 454 single samples were collected with 66 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	29099
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	84
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 454 single samples were collected with 84 monthly geomeans calculated. Two of the 84 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach**

LOE ID:	29100
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 454 single samples were collected with 11 samples correlated with a storm event. None of the 11 samples exceeded the single sample water quality

Data Reference:	<p>objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p> <p>National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station</p> <p>Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Fecal coliform density shall not exceed 200 per 100ml;</p> <p>Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	29101
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	491
Number of Exceedances:	129
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 491 single samples were collected with 129 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Enterococcus density shall not exceed 35 per 100 ml.</p> <p>Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.

Temporal Representation: Samples were collected from April 1999 through November 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID: 29093

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 430
Number of Exceedances: 156

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 430 single samples were collected with 156 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.

Temporal Representation: Samples were collected from April 1999 through November 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID: 29094

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 430 single samples were collected with 11 samples correlated with a storm event. Four of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point, Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through November 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point, Pacific Beach

LOE ID:	29095
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	430
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through

Data Reference:	November 2007. A total of 430 single samples were collected with 10 samples exceeding the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	29096
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	84
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 430 single samples were collected with 84 monthly geomeans calculated. From the 84 geomeans, three exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	29097
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April1999 through November 2007. A total of 430 single samples were collected with 11 samples correlated with a storm event. None of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	29173
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	465
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were eight beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected inside Pacific Beach Point , Pacific Beach, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	29102
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	84
Number of Exceedances:	30
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 491 single samples were collected with 84 monthly geomeans calculated. From the 84 geomeans, 30 exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April 1999 through November 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42716, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach

LOE ID:	29103
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through November 2007. A total of 491 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, four exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected inside Pacific Beach Point , Pacific Beach, California. Station identification number is EH-255.
Temporal Representation:	Samples were collected from April1999 through November 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach](#)
Water Body ID: CAC9063000020090422170012
Water Body Type: Coastal & Bay Shoreline

DECISION ID 43156 **Region 9**
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 1 of 133 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 1 of 133 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID: 30660
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 293

Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 302 single samples were collected of which 293 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID:	29170
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were two beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach	

LOE ID:	28912
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 302 single samples were collected with nine samples correlated with a storm event. None of the nine samples exceed the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.

Temporal Representation:

Samples were collected from April 1999 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID: 28911

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 76
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 302 single samples were collected with 76 monthly geomeans calculated. From the 76 geomeans, only one exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach**

LOE ID:	31154
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 229 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach**

LOE ID:	31153
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 205 dry month (April through October) single samples were collected with 59 dry month geomeans calculated. None of the 59 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID:	31152
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 230 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach
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LOE ID: 75226

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 73

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach to determine beneficial use support and results are as follows: 0 of 73 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach was collected at 1 monitoring site [Playa Del Norte]

Temporal Representation: Data was collected over the time period 1/3/2008-8/18/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach
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LOE ID: 28910

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	302
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 302 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID:	28909
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 261 single samples were collected with seven samples correlated with a storm event. None of the seven samples exceed the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID:	28906
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 301 single samples were collected with nine samples correlated with a storm event. None of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office. San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID: 28905

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 76

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 301 single samples were collected and 76 monthly geomeans calculated. None of the 76 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: [Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance](#)

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach**Region 9**

LOE ID:	28904
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	301
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 301 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach**Region 9**

LOE ID:	28908
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	75
Number of Exceedances:	0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 261 single samples were collected with 75 geomeans calculated. None of the 75 geomeans exceed the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID:	28902
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	301
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 301 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach	

LOE ID:	28907
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	261
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 261 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml;
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach	

LOE ID:	77683
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 57 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID:	75227
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 57 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Playa del Norte at Windansea Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

Region 9

LOE ID: 28903

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 9
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 301 single samples were collected with nine samples correlated with a storm event. From the nine samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

Region 9

LOE ID: 75225

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 57 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Playa del Norte at Windansea Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

LOE ID:	75221
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 57 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Playa del Norte at Windansea Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

Region 9

LOE ID:	30867
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	292
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 301 single samples were collected of which 292 are dry weather (AB411) samples and none of those samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43156, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach

Region 9

LOE ID:	30760
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	254
Number of Exceedances:	1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 261 single samples were collected of which 254 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Playa del Norte at Windansea Beach, San Diego, California. Station identification number is EH-280.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Ravina](#)
Water Body ID: CAC9063000020090422164430
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43594	Region 9
Pacific Ocean Shoreline, Scripps HA, at Ravina		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 57 of 378 samples exceed the water quality objective for total coliform of a single sample maximum of 230/100 ml..

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 57 of 378 samples exceed the water quality objective for total coliform of a single sample maximum of 230/100 ml and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Ravina	

LOE ID:	30868
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	302
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 313 single samples were collected of which 302 are dry weather AB411 samples. Of the 302 dry weather samples three exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	30761
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	272
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 281 single samples were collected of which 272 are dry weather (AB411) samples with eight samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	30661
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	294
Number of Exceedances:	17
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 304 single samples were collected of which 294 are dry weather (AB411) samples with 17 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Ravina

Region 9

LOE ID: 29272

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were five beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Samples were collected at Ravina at Windansea Beach, La Jolla, California.
Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:
QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	29204
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	313
Number of Exceedances:	54
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 313 single samples were collected with 54 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Ravina**

LOE ID:	29207
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 313 single samples were collected with 11 samples correlated with a storm event. One of the 11 samples exceeded the single sample water

quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID: 29206

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 313
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 313 single samples were collected with four samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	29205
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 313 single samples were collected with 11 samples correlated with a storm event. Five of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.

Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Ravina	

LOE ID:	29214
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	73
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 304 single samples were collected with 73 monthly geomeans calculated. Two of the 73 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Ravina	

LOE ID:	29213
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 281 single samples were collected and 72 geomeans calculated. None of the 72 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Ravina

Region 9

LOE ID:	29212
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	76
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 313 single samples were collected with 76 monthly geomeans calculated. One of the 76 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

[2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	29211
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 304 single samples were collected with 10 samples correlated with a storm event. Two of the 10 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID: 29210

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 304
Number of Exceedances: 19

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 304 single samples were collected with 19 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).
Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	29209
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 281 single samples were collected with 9 samples correlated with a storm event. One of the 9 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID: 29208

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	281
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 281 single samples were collected with 9 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Ravina

Region 9

LOE ID:	77684
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 55 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for

human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Ravina.

Temporal Representation:

The samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID: 75231

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 55
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 55 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Ravina site.

Temporal Representation:

Samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID: 75230

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	65
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Ravina to determine beneficial use support and results are as follows: 3 of 65 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Ravina was collected at 1 monitoring site [Ravina south Nicholson Pt]
Temporal Representation:	Data was collected over the time period 4/1/2008-8/25/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	75229
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 55 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ravina site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Ravina**

LOE ID:	75228
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 55 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ravina site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Ravina**

LOE ID:	31150
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 230 dry month (April through October) single samples were collected with 55 dry month geomeans calculated. None of the 55 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Ravina

LOE ID:	31149
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 262 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. One of the 60geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43594, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Ravina

Region 9

LOE ID: 31151

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 261 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Ravina, San Diego, California. Station identification number is EH-300.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach](#)
Water Body ID: CAC9063000020090422154646
Water Body Type: Coastal & Bay Shoreline

DECISION ID	42743	Region 9
Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of 80 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of 80 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach	

LOE ID:	75237
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	27

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach was collected at 1 monitoring site [Scripps Pier S]
Temporal Representation:	Data was collected over the time period 4/1/2008-5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	30662
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	240
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 247 single samples were collected of which 240 are dry weather (AB411) samples with seven exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.

Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach	

LOE ID:	77685
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the twenty-two samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach.
Temporal Representation:	The samples were collected from April 2008 to May 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach	

LOE ID:	75238
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the La Jolla Shores Beach site.
Temporal Representation:	Samples were collected from April 2008 to May 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	28925
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 247 single samples were collected with 58 monthly geomean collected. From the 58 geomeans, only one geomean exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID: 28913

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 248
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 248 single samples were collected with nine samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.

Temporal Representation: Samples were collected from March 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID: 28914

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 7
Number of Exceedances: 2

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 248 single samples were collected with seven samples correlated with a storm event. Two of the seven samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	31146
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 240 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation: Environmental Conditions:	Samples were collected from April 1999 through October 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	31147
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 200 dry month (April through October) single samples were collected with 50 dry month geomeans calculated. One of the 50 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation: Environmental Conditions:	Samples were collected from April 1999 through October 2007.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

Region 9

LOE ID: 31148

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 240 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. None of the 60 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

Region 9

LOE ID: 28918

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 248 single samples were collected and seven samples correlated with a storm event. None of the seven samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	28921
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	209
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 209 single samples were collected with six samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	29171
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were eight beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-

Objective/Criterion Reference:	contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met. California Code of Regulations, Title 17, Section 7960
Evaluation Guideline: Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	75232
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at the La Jolla Shores Beach site.
Temporal Representation:	Samples were collected from April 2008 to May 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	28924
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	247
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 247 single samples were collected with eight exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	28915
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	248
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 248 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach	

LOE ID:	28923
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 209 single samples were collected and six samples correlated with a storm event. From the six samples, none exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event

was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID: 28926

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 247 single samples were collected with seven samples correlated with a storm event. From the seven samples, only one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.

Temporal Representation: Samples were collected from March 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

March.
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID: 28922

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 52
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 209 single samples were collected and 52 geomeans calculated. From the 52 geomeans, none exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml;

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.

Temporal Representation: Samples were collected from March 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID: 30869

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	241
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 248 single samples were collected of which 241 are dry weather (AB411) samples with none of those samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	28917
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 248 single samples were collected and 59 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	30762
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	203
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 1999 through December 2007. A total of 209 single samples were collected of which 203 are dry weather (AB411) samples with six samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Scripps Pier at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-350.
Temporal Representation:	Samples were collected from March 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 42743, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach

LOE ID:	75236
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the La Jolla Shores Beach site.
Temporal Representation:	Samples were collected from April 2008 to May 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at South Casa Beach](#)
Water Body ID: CAC9063000020090422163431
Water Body Type: Coastal & Bay Shoreline

DECISION ID 46230 **Region 9**
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 0 of 92 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 0 of 92 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

LOE ID: 77686
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 49

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 49 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Scripps HA, at South Casa Beach.
Temporal Representation:	The samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

LOE ID:	31145
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2001 through October 2007. A total of 178 dry month (April through October) single samples were collected with 46 dry month geomeans calculated. None of the 46 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station

Temporal Representation:	identification number is EH-305.
Environmental Conditions:	Samples were collected from April 2001 through October 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach	

LOE ID:	30763
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	144
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 146 single samples were collected of which 144 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from February 2001 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach	

LOE ID:	30663
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	181
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 183 single samples were collected of which 181 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from February 2001 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID:	30870
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 182 single samples were collected of which 180 are dry weather (AB411) samples with one of those samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from February 2001 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

LOE ID:	75239
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 49 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the South Casa Beach site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

LOE ID:	75240
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 49 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the South Casa Beach site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID:	75241
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at South Casa Beach to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at South Casa Beach was collected at 1 monitoring site [South Casa beach]

Temporal Representation: Data was collected over the time period 4/14/2008-8/25/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

LOE ID: 75242

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 49

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 49 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the South Casa Beach site.

Temporal Representation: Samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

LOE ID: 31143

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 46

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2001 through October 2007. A total of 178 dry month (April through October) single samples were collected with 46 dry month geomeans calculated. None of the 46 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from April 2001 through October 2007
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID:	31144
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2001 through October 2007. A total of 142 dry month (April through October) single samples were collected with 37 dry month geomeans calculated. None of the 37 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from April 2001 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID: 29222

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 183 single samples were collected with two samples correlated with a storm event. None of the two samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from February 2001 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

March.
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID: 29223

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 42
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 182 single samples were collected with 42 monthly geomeans calculated. None of the 42 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from February 2001 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID: 29224

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 146 single samples were collected and 36 geomeans calculated. None of the 36 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from February 2001 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID:	29225
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 183 single samples were collected with 43 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from February 2001 through October 2007

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach	

LOE ID: 29220

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 146 single samples were collected with two samples correlated with a storm event. None of the two samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from February 2001 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information:

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID: 29221

Pollutant: Enterococcus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 183
 Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
 Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 183 single samples were collected with five samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.
 Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from February 2001 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID: 29215

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	182
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 182 single samples were collected with 13 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from February 2001 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID:	29216
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 182 single samples were collected with two samples correlated with a storm event. None of the samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from February 2001 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID:	29217
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	182
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 182 single samples were collected with one sample exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from February 2001 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID: 29219

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 146

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 146 single samples were collected with two samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.

Temporal Representation: Samples were collected from February 2001 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID: 29218

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2001 through October 2007. A total of 182 single samples were collected with two samples correlated with a storm event. None of the two samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from South Casa Beach, San Diego, California. Station identification number is EH-305.
Temporal Representation:	Samples were collected from February 2001 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46230, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at South Casa Beach

Region 9

LOE ID:	29273
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	2555
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were nine beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at South Casa Beach in La Jolla, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach](#)
Water Body ID: CAC9063000020090422170530
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44135	Region 9
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of 153 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of 153 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach	

LOE ID:	29084
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	284

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 284 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID:	29085
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 284 single samples were collected with 70 monthly geomeans calculated. None of the geomeans exceeded geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID: 29172

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: -N/A

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 225

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 225 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Bacteriological monitoring samples were collected at Tourmaline Surf Park, Pacific Beach, California.

Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach	

LOE ID:	29092
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 274 single samples were collected with 19 samples correlated with a storm event. From the 19 samples, four exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

Region 9

LOE ID:	29091
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	67
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 274 single samples were collected with 67 monthly geomeans calculated. From the 69 geomeans, one exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

Region 9

LOE ID:	29083
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	19
Number of Exceedances:	11

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 284 single samples were collected with 19 samples correlated with a storm event. From the 19 samples, 11 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID:	77687
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	85
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 85 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for

human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

Temporal Representation:

The samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID: 30664

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 255

Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 274 single samples were collected of which 255 are dry weather (AB411) samples with six samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.

Temporal Representation:

Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID:	30764
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	220
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 237 single samples were collected of which 220 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach**

LOE ID:	29090
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	274
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 274 single samples were collected with 10 samples

Data Reference:	<p>exceeding the single sample water quality objective.</p> Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Enterococcus density shall not exceed 35 per 100 ml.</p> <p>Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID:	29089
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 237 single samples were collected with 17 samples correlated with a storm event. Three of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p>
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Fecal coliform density shall not exceed 200 per 100ml;</p> <p>Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID: 29088

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 66

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 237 single samples were collected with 66 monthly geomeans calculated. None of the 66 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml;

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tourmaline Surf Park, Pacific Beach, California.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance](#)

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach**Region 9**

LOE ID:	30871
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	265
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 284 single samples were collected of which 265 are dry weather (AB411) samples and none of those samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach**Region 9**

LOE ID:	29087
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	237
Number of Exceedances:	4

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 237 single samples were collected with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID:	75248
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 86 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tourmaline Surf Park site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

Region 9

LOE ID:	75249
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 86 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tourmaline Surf Park site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

Region 9

LOE ID:	75250
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	103
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach to determine beneficial use support and results are as follows: 1 of 103 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100

Objective/Criterion Reference: mL.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach was collected at 1 monitoring site [Tourmaline drain outlet]

Temporal Representation: Data was collected over the time period 1/3/2008-8/25/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach	

LOE ID: 75251

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 85
 Number of Exceedances: 0

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Zero of the 84 geomeans exceeded the objective.
 Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at the Tourmaline Surf Park site.
 Temporal Representation: Samples were collected from January 2008 to August 2010.
 Environmental Conditions:
 QAPP Information: The samples were collected for the Beach Watch program.
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach	

LOE ID: 29086

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19
 Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 282 single samples were collected with 19 samples correlated with a storm event. None of the samples exceeded the water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach	

LOE ID:	31137
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 177 dry month (April through October) single samples were collected with 48 dry month geomeans calculated. One of the 48 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID:	31141
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 146 dry month (April through October) single samples were collected with 44 dry month geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California.
Temporal Representation:	Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID: 31142

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 48
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 174 dry month (April through October) single samples were collected with 48 dry month geomeans calculated. None of the 48 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44135, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID: 29082

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	284
Number of Exceedances:	31
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 284 single samples were collected with 31 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tourmaline Surf Park, Pacific Beach, California. Station ID number is FM-030.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

DECISION ID	50036	Region 9
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 2/24/07, 2/23/08, 2/28/09, and 3/6/10 for this water body. The total weight of trash (lbs) collected on these dates was 3,180. Using the metric, Coastkeeper classified this water body

as high for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.

3. This process is scientifically defensible and reproducible.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50036, Trash

Region 9

Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach

LOE ID:	75252
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	Not Recorded
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 2/24/07, 2/23/08, 2/28/09, and 3/6/10 for this water body. The total weight of trash (lbs) collected on these dates was 3,180. However, using the metric, Coastkeeper classified this water body as high for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Tourmaline - Pacific Ocean.
Temporal Representation:	Four cleanups occurred on 2/24/07, 2/23/08, 2/28/09, and 3/6/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach](#)
Water Body ID: CAC9063000020090422164811
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50038	Region 9
Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Using data from 1999 to 2007, one of 57 samples exceed the water quality objective for enterococcus of a single sample maximum of 104/100ml for the protection of REC-1, and 0 of 56 samples exceed the WQO for total coliform of a SSM of 230/100ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Using data from 1999 to 2007, one of 57 samples exceed the water quality objective for enterococcus of a single sample maximum of 104/100ml for the protection of REC-1, and 0 of 56 samples exceed the WQO for total coliform of a SSM of 230/100ml and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach	

LOE ID:	28977
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 56 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California. Station identification number is EH-290.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach

LOE ID:	29120
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 57 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California. Station identification number is EH-290.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach

LOE ID: 29121

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 57 single samples were collected with 20 monthly goemeans calculated. Two of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California. Station identification number is EH-290.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach

LOE ID: 29119

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 57 single samples were collected with 20 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California. Station identification number is EH-290.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach

LOE ID:	29118
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 57 single samples were collected no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California. Station identification number is EH-290.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach

LOE ID:	29116
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 56 single samples were collected with 19 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California. Station identification number is EH-290.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach

Region 9

LOE ID: 29117

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 56 single samples were collected with 19 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California. Station identification number is EH-290.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 50038, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach

Region 9

LOE ID: 29175

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Vista de la Playa, Windansea Beach, La Jolla, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla](#)
Water Body ID: CAC9063000020090422163836
Water Body Type: Coastal & Bay Shoreline

DECISION ID	46281	Region 9
Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 14 of 160 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 14 of 160 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla	

LOE ID: 29126
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 5

Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with five samples correlated with a storm event. Only one sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the California Ocean Plan the median coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach Å– Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	29129
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with 5 samples correlated with a storm event. None of the 5 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla	

LOE ID:	29128
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	69
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with 69 monthly geomeans calculated. One of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.

Temporal Representation: Samples were collected from June 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID: 75073

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 3

Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla was collected at 1 monitoring site [Coast Blvd.-Nicholson Pt]

Temporal Representation: Data was collected over the time period 1/2/2008-4/1/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID: 29130

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	158
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 158 single samples were collected with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	29131
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	68
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 158 single samples were collected with 68 monthly geomeans calculated. From the 68 geomeans, three exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	29132
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 158 single samples were collected with five samples correlated with a storm event. From the five samples, one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla,

Temporal Representation:	California. Station identification number is FH-060.
Environmental Conditions:	Samples were collected from June 1999 through December 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla	

LOE ID:	31136
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through October 2007. A total of 124 dry month (April through October) single samples were collected with 49 dry month geomeans calculated. One of the 49 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla	

LOE ID:	29176
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were two beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Whispering Sands Beach Â– Nicholson Point, La Jolla, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	31134
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through October 2007. A total of 125 dry month (April through October) single samples were collected with 49 dry month geomeans calculated. None of the 49 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach Å– Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	30872
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	157
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected of which 152 are dry weather (AB411) samples and none of those samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.

Temporal Representation:

Samples were collected from June 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID: 30665

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 153
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 158 single samples were collected of which 153 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).
Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.

Temporal Representation:

Samples were collected from June 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	30765
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	152
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected of which 152 are dry weather (AB411) samples with zero sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml;
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	29125
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with five samples correlated with a storm event. None of the samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	29124
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	68
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with 68 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla	

LOE ID:	29123
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	157
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	29122
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	157
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with 13 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the California Ocean Plan the median coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach Æ Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla**

LOE ID:	31135
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through October 2007. A total of 126 dry month (April through October) single samples were collected with 50 dry month geomeans calculated. None of the 50 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 46281, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla

LOE ID:	29127
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	157
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 1999 through December 2007. A total of 157 single samples were collected with zero sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Whispering Sands Beach – Nicholson Point, La Jolla, California. Station identification number is FH-060.
Temporal Representation:	Samples were collected from June 1999 through December 2007.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Tecolote Shores](#)
Water Body ID: CAC9065000020090428092025
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43511	Region 9
Mission Bay Shoreline, at Tecolote Shores		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown Unknown Nonpoint Source Unknown Point Source
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.3 of the Listing Policy. Under Section 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 54 of 484 samples exceeded the water quality objective for enterococcus of a single sample maximum of 104/100ml for the protection of REC-1 and 96 of 496 samples exceed the water quality objective for total coliform of 230/100 ml for the protection of SHELL< and these exceed the allowable frequency listed in Section 4.3 and Table 3.2 of the Listing Policy.
4. The was approved by USEPA on 06/22/2011. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Tecolote Shores	

LOE ID: 77614
Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	103
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One of the 103 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Tecolote Shores stations Tecolote playground, watercraft area and Tecolote Shores, swim area.
Temporal Representation:	The samples were collected from April 2008 to August 2010 at the playground station and from June 2009 to August 2010 at the swim area station.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID:	30538
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	316
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 316 dry weather (AB411) single samples were collected with 14 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID:	74371
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 70 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tecolote playground watercraft area site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID:	74372
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 34 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tecolote Shores, swim area site.
Temporal Representation:	Samples were collected approximately once a week from June 2009 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID:	74373
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 70 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tecolote playground, watercraft area site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Tecolote Shores**

LOE ID:	74374
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 34 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tecolote Shores, swim area site.
Temporal Representation:	Samples were collected approximately once a week from June 2009 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Tecolote Shores**

LOE ID:	74375
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	122
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Tecolote Shores to determine beneficial use support and results are as follows: 6 of 122 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Bay Shoreline, at Tecolote Shores was collected at 2 monitoring sites [Tecolote Shores watercraft, Tecolote Shores swim area]

Temporal Representation: Data was collected over the time period 4/2/2008-8/24/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID: 74376

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 70

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 70 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Tecolote playground site.

Temporal Representation: Samples were collected approximately once a week from April 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID: 74377

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 34

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 34 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tecolote Shores, swim area site.
Temporal Representation:	Samples were collected approximately once a week from June 2009 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID:	30150
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	61
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 61 beach advisory days for this location. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 to December 2007. Data used was the number of days the beach was posted with an Advisory when the ocean or bay failed to meet the bacteriological standards. County of Orange, March 2007, Annual Ocean and Bay Water Quality Report, 2006 Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960

Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at Tecolote Shores in Mission Bay.
Temporal Representation:	The beach advisory covers the time frame of January 2001 -December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Tecolote Shores	

LOE ID:	30349
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2933
Number of Exceedances:	959
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	<p>Below is a copy of the 2006 LOE information for the data used to support the listing of Mission Bay Shoreline:</p> <p>Available data indicate sufficient exceedances of bacterial indicator objectives. There were 576 out of 3662 samples exceeding the single sample maximum for enterococci, 959 out of 2933 exceedances of the geomean enterococci, and 333 out samples exceeding the single sample maximum for fecal coliform (USEPA, 2007).</p>
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or</p> <p>(B) 10,000 total coliform bacteria per 100 milliliters; or</p> <p>(C) 400 fecal coliform bacteria per 100 milliliters; or</p> <p>(D) 104 enterococcus bacteria per 100 milliliters.</p> <p>Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:</p> <p>(A) 1,000 total coliform bacteria per 100 milliliters; or</p> <p>(B) 200 fecal coliform bacteria per 100 milliliters; or</p> <p>(C) 35 enterococcus bacteria per 100 milliliters (DHS, 1999).</p>
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	In 2006, data from sampling sites along the Mission Bay shoreline were aggregated for the assessment. For 2008, the 2006 Mission Bay Shoreline segment has been split into smaller

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

segments and each represents an area near the sampling location of the data being assessed. 'Mission Bay Shoreline, at Tecolote Shores' is one of the sampling locations for Mission Bay Shoreline and is considered to be part of the original listing From 03/21/2000-10/30/2005.

Data record: 2000-2005, San Diego County Health Dept.

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID: 31237

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 51
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 246 dry month (April through October) single samples were collected with 51 dry month geomeans calculated. One of the 51 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.

Temporal Representation: Samples were collected from April 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID: 31238

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 287 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 3 of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID:	31235
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 292 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. 5 of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID:	30790
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	356
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 374 single samples were collected of which 356 are dry weather (AB411) samples with six samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID: 30554

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 361
Number of Exceedances: 47

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 381 single samples were collected of which 361 are dry weather (AB411) samples with 47 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID: 28780

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	374
Number of Exceedances:	90
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 374 single samples were collected with 90 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID:	28781
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	18
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 374 single samples were collected with 18 samples correlated with a storm event. Twelve of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID:	28782
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	76
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 381 single samples were collected with 76 monthly geomeans calculated. Fifteen of the 76 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID: 28783

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 10

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 381 single samples were collected with 20 samples correlated with a storm event. Ten of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Tecolote Shores**

LOE ID:	28784
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	381
Number of Exceedances:	57
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 381 single samples were collected with 57 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Tecolote Shores**

LOE ID:	28785
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	68
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999

Data Reference:	through October 2007. A total of 335 single samples were collected and 68 geomeans calculated. One of the 68 geomeans exceeded the geomean water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID:	28786
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 335 single samples were collected with 19 samples correlated with a storm event. Ten of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID: 28787

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 335

Number of Exceedances: 24

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 335 single samples were collected with 24 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID: 28788

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 76
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 374 single samples were collected with 76 monthly geomeans calculated. Four of the 76 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.

Temporal Representation: Samples were collected from January 1999 through October 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID: 28789

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 374

Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 374 single samples were collected with 13 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria
Mission Bay Shoreline, at Tecolote Shores

Region 9

LOE ID:	28790
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2007. A total of 374 single samples were collected with 18 samples correlated with a storm event. Seven of the 18 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tecolote Shores near storm drain, San Diego, California. Station identification number is MB-040.
Temporal Representation:	Samples were collected from January 1999 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43511, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Tecolote Shores

LOE ID:	81130
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Tecolote Shores to determine beneficial use support and results are as follows: 7 of 123 samples collected during the AB411 period exceed the SSM criterion for enterococcus.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum for enterococcus: do not exceed 104/100 ml (San Diego Regional Board Basin Plan 2008)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Tecolote Shores was collected at 2 monitoring sites [Tecolote Shores watercraft, Tecolote Shores swim area]
Temporal Representation:	Data was collected over the AB411 time period 4/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane](#)
Water Body ID: CAC9013000020090428111104
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44206	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 15 of 166 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 15 of 166 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID: 30979
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans one exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID:	30317
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	28803
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans calculated. None of the 32 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	28802
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 2 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	30727
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	535
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 535 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID:	30977
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID: 30624

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 536
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID: 28801

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 12
Number of Exceedances: 1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, one exceeded the water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	30832
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	536
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with four of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID:	74762
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Linda Lane (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane**

LOE ID:	74761
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 147 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from coastal stormdrain at Linda Lane(surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane**

LOE ID:	74760
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Linda Lane (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	74759
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from coastal stormdrain at Linda Lane (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	74758
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Linda Lane (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

Region 9

LOE ID:	74735
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from coastal stormdrain at Linda Lane (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	28804
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. None of the 12 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the

full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID: 28798

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 12
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, three exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID:	28797
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	548
Number of Exceedances:	23
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 23 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID:	28800
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. None of the 32 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation: Environmental Conditions:	Samples were collected at least once a week from May 2004 through December 2006.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID:	28799
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 5 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation: Environmental Conditions:	Samples were collected at least once a week from May 2004 through December 2006.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane**

LOE ID:	28807
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, three exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane**

LOE ID: 28806

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans, three exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane	

LOE ID:	28805
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44206, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane

LOE ID:	30978
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, San Clemente HA, San Clemente City Beach at Linda Lane Park, station id LINDAL. This location is found at the western end of Linda Lane Park in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane](#)
Water Body ID: CAC9013000020090428110412
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44031	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 11 of the 166 geomean samples exceed the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 11 of the 166 geomean samples exceed the water quality objective for enterococcus of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane	

LOE ID:	74789
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	147
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 147 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from coastal stormdrain West Mariposa (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID:	74788
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at West Mariposa (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 74787

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 2

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Two of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from coastal stormdrain West Mariposa (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 74786

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134
Number of Exceedances: 9

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at West Mariposa (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane	

LOE ID:	30982
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period(SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of

Temporal Representation: West Escalones and West Mariposa in San Clemente.
Samples were collected at least once a week from May 2004 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 30980

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006.
A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period(SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 30981

Pollutant: Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zeroexceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID:	74763
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml.
Objective/Criterion Reference:	Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from coastal stormdrain West Mariposa (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane	

LOE ID:	28809
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 10 samples correlated with a storm event. From those 10 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the

full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 28808

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 548
Number of Exceedances: 35

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 35 exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 74790

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at West Mariposa (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID:	28814
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane	

LOE ID:	28813
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane	

LOE ID:	28812
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected 10 samples correlated with a storm event. From the 10 samples, only one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID:	30728
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	537
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected of which 537 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID:	30833
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	538
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 538 are dry weather (AB411) samples with two of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane
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LOE ID:	30626
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	538
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 538 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane
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LOE ID:	30318
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	<p>Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.</p> <p>For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Clemente HA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Clemente HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.</p>
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane	

LOE ID:	28818
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 10 samples correlated with a storm event. From the 10 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p>
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID:	28817
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans calculated. From the 32 geomeans, two exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of

Temporal Representation: West Escalones and West Mariposa in San Clemente.
Environmental Conditions: Samples were collected at least once a week from May 2004 through December 2006.
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 28816

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 7

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with seven samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 28811

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomean calculated. None fo the monthly geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID:	28810
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	548
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44031, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane

LOE ID: 28815

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 10 samples correlated with a storm event. None of the samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Clemente City Beach at Mariposa Lane, station id MARIPO, in the San Clemente HA. This station location is found near the intersection of West Escalones and West Mariposa in San Clemente.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. Rainfall data was available for the same time period.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff

because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Camel Point](#)
Water Body ID: CAC9011400020090505111518
Water Body Type: Coastal & Bay Shoreline

DECISION ID	42707	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Camel Point		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 59 of the 1127 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 59 of the 1127 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Camel Point	

LOE ID:	29231
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	984

Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 984 individual samples with 10 samples exceeding the single sample maximum water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

Region 9

LOE ID:	29234
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	982
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 1982. There were 982 individual samples collected with none exceeding the single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID: 31068

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.

Temporal Representation: Samples were collected weekly from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID: 31067

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

Region 9

LOE ID:	74636
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	145
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Dana Point HSA, at Camel Point to determine beneficial use support and results are as follows: 6 of 145 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Camel Point was collected at 2 monitoring sites [Aliso Beach - South, Camel Point]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID:	31069
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 1999 through December 2006. A total of 36 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID:	29136
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	982
Number of Exceedances:	53
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 982 individual samples collected with 53 exceeding the shellfish single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Camel Point**

LOE ID:	29244
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 893 individual samples collected and 108 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

[Report](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID:	29245
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 982 individual samples. Between March 2002 and December 2007, 51 samples were correlated with storm events. None of the 51 samples exceeded the single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID: 29195

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108

Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 880 individual samples with 108 monthly geomeans calculated. From the 108 geomeans 4 exceeded the geomean water quality objective for enterococcus.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006. Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID:	29196
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	969
Number of Exceedances:	60
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 969 individual samples with 60 exceeding the single sample maximum water quality objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Camel Point**

LOE ID:	29197
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 984 individual samples and 108 geomeans calculated. Of the 108 geomeans, none exceeded the geomean water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

[Report](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID:	29137
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange January 1999 through December 2007. There were 982 individual samples collected. For the period from March 2002 through December 2007, 51 samples were correlated with a storm event. From the 51 samples, 18 exceeded the shellfish single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long:

Temporal Representation: 33.50499/-117.74845.
Samples were collected weekly from January 1999 through December 2006; however, rainfall data is only available from March 2002 through December 2006.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Camel Point

LOE ID: 29194

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 51
Number of Exceedances: 13

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 969 individual samples collected. For the period between March 2002 and December 2007, 51 samples were correlated with a storm event. Of the 51 samples, 13 exceeded the single sample maximum water quality objective for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)
[Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however,

Environmental Conditions:	rainfall data is only available from March 2002 through December 2007. Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 42707, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Camel Point	

LOE ID:	29230
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 984 individual samples. From the period of March 2002 through December 2007, 51 samples were correlated with storm events. Of these 51 samples, two exceeded the single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Camel Point, station id S7, in the Dana Point HSA. Lat/Long: 33.50499/-117.74845.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff

because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd](#)
Water Body ID: CAC9011400020090505130453
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44493	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: In 2006, 'Pacific Ocean Shoreline, Dana Point HSA' was listed for Indicator Bacteria. For 2008, the 2006 Dana Point HSA segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd' is one of the sampling locations for Pacific Ocean Shoreline, Dana Point HSA and is considered to be part of the original listing.

For this 2008 assessment, the Regional Board has chosen to replace the 'indicator bacteria' listing with separate assessments of the specific indicator bacteria, such as coliform, fecal coliform, and enterococcus, for removal or non-removal from the 303(d) list.

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Seven of samples exceeded the water quality objective for Shellfish Harvesting. Two out of 117 samples exceeded the single sample objective objective for enterococcus, Zero out of 116 samples exceeded the single sample objective for fecal coliform, and Zero out of 117 samples exceeded contact recreation the single sample maximum evaluation guideline for Total Coliform.

This water body segment is identified as an AB411 beach and data collected during the time frame of April 1st to October 31st (dry weather) is assessed using a four percent exceedance percentage (section 4.3 of Listing Policy). There are three additional lines of evidence for dry weather single sample. Zero of 108 samples exceeded the recreational use single sample criteria for Total Coliform and Fecal Coliform, and Two out of 108 samples exceeded the objective for Enterococcus.

In LOEs 29517, 29521, 29550, and 29529 the Regional Board calculated exceedances for samples taken only during storm events. This information was not used in determining listing decisions, but is of interest to the Regional Board and has been included as additional anecdotal information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 117 samples exceeded the Shellfish Harvesting water quality objective, and 0 of 117 single samples and 0 of 15 calculated geomeans exceed the water contact recreation water quality objective.

None of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.

4. . Zero of 108 samples exceeded the recreational use single sample criteria for Total Coliform and Fecal Coliform, and Two out of 108 samples exceeded the objective for Enterococcus . This does not exceed the allowable limit listed in Table 4.2 (at a four percent exceedance percentage – AB411) of the Listing Policy.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID: 29233

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: -N/A

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 1999 to June 2006, there were and two beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data Reference: Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
[County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

Objective/Criterion Reference: (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Bacteriological monitoring samples were collected at Salt Creek Beach Park at Dana Strands Road

Temporal Representation: The beach posting covers the time frame of January 1999 -June 2006.

Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd**

LOE ID:	30298
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Dana Point HSA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Dana Point HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd**

LOE ID:	29516
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	117
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005

Data Reference:	through January 2007. There were 117 individual samples collected with seven exceeding the shellfish single sample maximum water quality objective for total coliform. Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID:	29517
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected with nine samples correlated with a storm event. None of the nine samples exceeded the shellfish single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID: 29521

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected with nine samples correlated with a storm event. None of the nine samples exceeded the single sample maximum water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID: 29518

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 117
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected with no samples exceeding the single sample maximum water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID: 29519

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected with 15 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID:	30688
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 116 individual samples collected of which 108 are dry weather (AB411) samples with no samples exceeding the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd	

LOE ID:	30802
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected of which 108 are dry weather (AB411) samples with no samples exceeding the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd	

LOE ID:	29548
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected with two samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID:	29549
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected with 15 monthly geomeans calculated. None of the monthly geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID: 29550

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected with nine samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID: 29524

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 116
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 116 individual samples collected with no samples exceeding the single sample maximum water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID: 29527

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 116 individual samples collected and 15 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID:	29529
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 116 individual samples collected with eight samples correlated with a storm event. None of the storm samples exceeded the geomean water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation:

Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44493, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Strands Surfzone at Dana Strands Rd

LOE ID:

30566

Pollutant:

Enterococcus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

108

Number of Exceedances:

2

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 117 individual samples collected of which 108 are dry weather (AB 411) samples with two samples exceeding the single sample water quality objective.

Data Reference:

[Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference:

Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Dana Strands at Dana Strands road, station id S1, in the Dana Point HSA. Lat/Long: 33.46959/-117.71826.

Temporal Representation:

Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido](#)
Water Body ID: CAC9011400020090505122717
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43267	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, two of the 229 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, two of the 229 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido	

LOE ID:	77601
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	121

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 121 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido.
Temporal Representation:	The samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

LOE ID:	29237
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 928 individual samples collected and 108 monthly geomeans calculated. None of the 108 geomeans exceed the water contact recreation geomean water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.

Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

Region 9

LOE ID:	29236
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 928 individual samples collected. Between March 2002 and December 2007, 51 samples were correlated with storm events. None of the 51 samples exceed the water contact recreation single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

Region 9

LOE ID: 29201

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 930 individual samples collected with 108 monthly geomeans calculated. From the 108 geomeans, none exceeded the water contact recreation geomean water quality objective for fecal coliform.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

Region 9

LOE ID: 29145

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 51
Number of Exceedances: 8

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from between January 1999 and December 2007. There were 929 individual samples collected. For the period between March 2002 and December 2007, 51 samples were correlated with storm events. From the 51 storm events, 8 samples exceeded the water contact recreation single sample maximum water quality objective for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido	

LOE ID:	29142
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	928
Number of Exceedances:	64
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 928 individual samples collected with 64 exceeding the shellfish single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

[Report](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

LOE ID:	29143
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	929
Number of Exceedances:	45
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 929 individual samples collected with 45 samples exceeding the water contact recreation single sample maximum water quality objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006. Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	

QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004
Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria	
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido	
LOE ID:	29144
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 929 individual samples collected with 108 monthly geomeans calculated. From the 108 geomeans, 2 exceeded the water contact recreation geomean water quality objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido	

LOE ID:	29139
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	51
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 928 individual samples collected. Between March 2002 and December 2007, 51 samples were correlated with storm events. From the 51 storm samples, 18 exceeded the shellfish single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

Region 9

LOE ID:	29200
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	930
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 930 individual samples collected with 14 samples exceeding the water contact recreation single sample maximum water quality objective for fecal

Data Reference:	coliform. Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

LOE ID:	29198
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 930 individual samples collected with 108 monthly geomeans calculated. For the period of March 2002 through December 2007, 51 samples could be correlated with storm events. Of the 51 storm events, only one sample exceeded the water contact recreation single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)
[Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:
QAPP Information: County of Orange Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

Region 9

LOE ID: 29241
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 928
Number of Exceedances: 0
Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange between January 1999 and December 2007. There were 928 individual samples collected with no samples exceeding the water contact recreation single sample maximum water quality objective for total coliform.
Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido**

LOE ID:	31072
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido**

LOE ID:	31071
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans 13 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

Region 9

LOE ID:	31070
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans four exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Lido, station id S5, in the Dana Point HSA. Lat/Long: 33.50051/-117.74504.

Temporal Representation: Samples were collected weekly from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

LOE ID: 74654

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 121 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Laguna Lido Apartment site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

LOE ID: 74653

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Laguna Lido Apartment site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

LOE ID:	74481
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Laguna Lido Apartment site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43267, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido

LOE ID:	74480
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	142
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido to determine beneficial use support and results are as follows: 0 of 142 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido was collected at 1 monitoring site [Laguna Lido Apartment]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach](#)
Water Body ID: CAC9011400020090505125551
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43463	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under Section 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 154 of 212 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1, 56 of 217 geomean samples exceed the WQO for total coliform for the protection of REC-1, and 73 of 198 exceed the WQO for total coliform for the protection of SHELL, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID: 30803

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected of which 95 are dry weather (AB411) samples with no samples exceeding the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Temporal Representation:	Samples were collected weekly from January 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	74528
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	70
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seventy of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin. California Ocean Plan. Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Salt Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	74529
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	125
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One hundred twenty-five of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Salt Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	74792
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 40 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Monarch Beach.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	74793
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirteen of the fourteen geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Salt Creek.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach**

LOE ID:	75110
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 40 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Monarch Beach.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach**

LOE ID:	75111
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	19
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nineteen of the 19 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected Salt Creek.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	75112
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	17
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seventeen of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Salt Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	75113
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	11

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eleven of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Salt Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	75114
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	17
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seventeen of the 19 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Salt Creek.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	75115
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 40 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Monarch Beach.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	30297
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline'Pacific Ocean Shoreline, Dana Point HSA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Dana Point HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified

Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information: Unspecified

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 77602

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 58

Number of Exceedances: 36

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Thirty-six of the fifty-eight samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch. At two sites, Monarch Beach - North and Salt Creek.

Temporal Representation: The samples were collected from January 2008 to October 2009.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 75153

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	93
Number of Exceedances:	43
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch to determine beneficial use support and results are as follows: 43 of 93 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch was collected at 2 monitoring sites [MONARCH BEACH NORTH, SALT CREEK]
Temporal Representation:	Data was collected over the time period 1/3/2008-10/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	75154
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	43
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty-three of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Salt Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 30689

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 94
Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected of which 94 are dry weather (AB411) samples with five samples exceeding the single sample water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.

Temporal Representation: Samples were collected weekly from January 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 29561

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 63 individual samples collected with eight samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Temporal Representation:	Samples were collected weekly from January 2005 through January 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	29560
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 63 individual samples collected with 15 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Temporal Representation:	Samples were collected weekly from January 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	29559
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 63 individual samples collected with 6 samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Temporal Representation:	Samples were collected weekly from January 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	29558
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with 11 samples correlated with a storm event. One of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Temporal Representation:	Samples were collected weekly from January 2005 through January 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	29552
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with 10 samples correlated with a storm event. One of the 10 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Temporal Representation:	Samples were collected weekly from January 2005 through January 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	29551
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	105
Number of Exceedances:	30
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with 30 exceeding the shellfish single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.

Temporal Representation: Samples were collected weekly from January 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 29555

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 10
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with 10 samples correlated with a storm event. None of the 10 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.

Temporal Representation: Samples were collected weekly from January 2005 through January 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 29554

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with 25 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.

Temporal Representation: Samples were collected weekly from January 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 29553

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 105
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with no samples exceeding the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Temporal Representation:	Samples were collected weekly from January 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	30567
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 63 individual samples collected of which 55 are dry weather (AB 411) samples with 6 samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located north of the Salt Creek outlet at the

Temporal Representation: surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.
Environmental Conditions: Samples were collected weekly from January 2005 through January 2007.
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 29557

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with 24 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.

Temporal Representation: Samples were collected weekly from January 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 75155

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	149
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 149 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Salt Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	29232
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	461
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 461 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange, March 2007, Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the

standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Bacteriological monitoring samples were collected at Monarch Beach, Salt Creek County Beach, Dana Strands, and Ocean Institute Beach. The posting covers 3 miles of beach shoreline.

Temporal Representation:

The beach posting covers the time frame of January 2000 -December 2006.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43463, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:

29556

Pollutant:

Fecal Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

105

Number of Exceedances:

6

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the City of Dana Point from a January 2005 through January 2007. There were 105 individual samples collected with six samples exceeding the single sample water quality objective.

Data Reference:

[Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference:

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were taken at a sampling station located north of the Salt Creek outlet at the surfzone of Monarch Beach (station id OSL25). Lat/Long: 33.48172/-117.72595.

Temporal Representation:

Samples were collected weekly from January 2005 through January 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the Water Quality Criteria for Arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Seven samples exceeded the Water Quality Criteria for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49736, Arsenic	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	74513
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the seven samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 8 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected from SCM-1 and SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.

Temporal Representation:

Samples were collected from SCM-1 on 9/7/2006, 12/27/2006, 10/11/2007, and 1/24/2008. Samples were collected from SCM-1d on 10/11/2007, 5/14/2008, 10/1/2008, 12/15/2008, and 4/28/2008.

Environmental Conditions:

Samples were collected from stormwater runoff on 12/15/2008, 1/24/2008, and 12/27/2006, the remainder were dry weather samples.

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	49738	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Nine samples exceeded the Water Quality Criteria Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49738, Cadmium	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	74514
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the nine samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 1 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SCM-1 and SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.
Temporal Representation:	Samples were collected from SCM-1 on 9/7/2006, 12/27/2006, 10/11/2007, and 1/24/2008. Samples were collected from SCM-1d on 10/11/2007, 5/14/2008, 10/1/2008, 12/15/2008, and 4/28/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/15/2008, 1/24/2008, and 12/27/2006, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49740	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Nine samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49740, Chlorpyrifos

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	74525
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the nine samples exceeded the Criteria Continuous Concentration for Chlorpyrifos of 9 ng/L. The reporting limit for the non-detect sample was 10 ng/L which is greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at site SCM-1 and SCM-1d from Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch.
Temporal Representation:	Samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch site SCM-1 in September and December of 2006; October 2007; and January of 2008. Samples from SCM-1d were collected in October 2007; May, October and December of 2008; April of 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49742

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the five samples exceed the Objective for dissolved copper in marine habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the five samples exceed the Objective for dissolved copper in marine habitat and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49742, Copper

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID: 74526

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 5
Number of Exceedances: 1

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: One of the five samples exceeded the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L to protect aquatic life in marine waters.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.

Temporal Representation:	Samples were collected from SCM-1d on 10/11/2007, 5/14/2008, 10/1/2008, 12/15/2008, and 4/28/2009.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/15/2008.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49750	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Nine samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49750, Diazinon		Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

LOE ID:	74527
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality:	None of nine samples exceeded the maximum concentration for Diazinon criteria of 820.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Samples were collected at site SCM-1 and SCM-1d from Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch
Temporal Representation:	Samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch site SCM-1 in September and December of 2006; October 2007; and January of 2008. Samples from SCM-1d were collected in October 2007; May, October and December of 2008; April of 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49745	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Nine samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 49745, Lead**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach**

LOE ID:	75116
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the nine samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SCM-1 and SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.
Temporal Representation:	Samples were collected from SCM-1 on 9/7/2006, 12/27/2006, 10/11/2007, and 1/24/2008. Samples were collected from SCM-1d on 10/11/2007, 5/14/2008, 10/1/2008, 12/15/2008, and 4/28/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/15/2008, 1/24/2008, and 12/27/2006, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID**49749****Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach**

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the water quality objective for malathion for the protection of marine aquatic life.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceed the water quality objective for malathion for the protection of marine aquatic life and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49749, Malathion

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	75133
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Zero of five samples tested for Malathion exceeded the maximum concentration for Malathion of 100 ng/L .
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected at site SCM-1 and SCM-1d from Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch.
Temporal Representation:	Samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at site SCM-1d in October 2007; May, October and December of 2008; April of 2009.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of five samples exceed the water quality objective for Nickel for the protection of Marine habitat beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of five samples exceed the water quality objective for Nickel for the protection of Marine habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

LOE ID:	75135
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Water Board staff assessed Orange County Stormwater Program data for Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 5 ug/L to protect

Objective/Criterion Reference:	aquatic life in marine waters. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.
Temporal Representation:	Samples were collected from SCM-1d on 10/11/07, 5/14/08, 10/1/08, 12/15/08 and 4/28/09.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/15/2008, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

DECISION ID	49755	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Objective for Nitrogen, ammonia (Total Ammonia).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Nine samples exceeded the Water Quality Objective for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49755, Nitrogen, ammonia (Total Ammonia)	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID:	75136
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of nine sample medians exceeded the water quality objective for total ammonia. Each samples was calculated a median using the sample and all other samples taken previously within a 180-day period.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Ocean Plan objective for total ammonia as nitrogen is a moving 6-month median of 600 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station SCM1.
Temporal Representation:	Samples were collected from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49756	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the Water Quality Objective for Selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Seven samples exceeded the Water Quality Objective for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49756, Selenium

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	75137
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Water Board staff assessed Orange County Stormwater Program data for Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Selenium.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SCM-1 and SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.
Temporal Representation:	Samples were collected from SCM-1 on 9/7/2006, 12/27/2006, 10/11/2007, and 1/24/2008. Samples were collected from SCM-1d on 10/11/2007, 5/14/2008, 10/1/2008, 12/15/2008, and 4/28/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/15/2008, 1/24/2008, and 12/27/2006, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	Quality Assurance Project Plan for the Orange County Stormwater Program.

DECISION ID

49757

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria for Silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Nine samples exceeded the Water Quality Criteria for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49757, Silver

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach

LOE ID:	75152
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the nine samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 0.7 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SCM-1 and SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.
Temporal Representation:	Samples were collected from SCM-1 on 9/7/2006, 12/27/2006, 10/11/2007, and 1/24/2008. Samples were collected from SCM-1d on 10/11/2007, 5/14/2008, 10/1/2008, 12/15/2008, and 4/28/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/15/2008, 1/24/2008, and 12/27/2006, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality

QAPP Information Reference(s):

DECISION ID	49760	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach		

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Nine samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49760, Zinc	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	

LOE ID: 74794
Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Marine Habitat
Number of Samples: 9
Number of Exceedances: 0
Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the nine samples exceeded the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)
SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SCM-1 and SCM-1d located on the Pacific Coast-Monarch Beach, at the mouth of Salt Creek.
Temporal Representation:	Samples were collected from SCM-1 on 9/7/2006, 12/27/2006, 10/11/2007, and 1/24/2008. Samples were collected from SCM-1d on 10/11/2007, 5/14/2008, 10/1/2008, 12/15/2008, and 4/28/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/15/2008, 1/24/2008, and 12/27/2006, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road](#)
Water Body ID: CAC9011400020090505130202
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43039	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. In the latest data, four of the 152 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. In the latest data, four of the 152 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road	

LOE ID: 30299
Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded
Beneficial Use: Water Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Dana Point HSA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Dana Point HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road	

LOE ID:	77618
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	152
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eleven of the 152 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road
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LOE ID:	29591
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	142
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with three samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road
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LOE ID:	30804
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected of which 133 are dry weather (AB411) samples with none exceeding the single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID:	30690
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected of which 133 are dry weather (AB411) samples with no samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.

Temporal Representation:

Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID: 29583

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 142
Number of Exceedances: 13

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with 13 exceeding the shellfish single sample maximum water quality objective for total coliform.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.

Temporal Representation:

Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID: 29636

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories

Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	461
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 461 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Monarch Beach, Salt Creek County Beach, Dana Strands, and Ocean Institute Beach. The posting covers 3 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road		
LOE ID:	29584	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Shellfish Harvesting	
Number of Samples:	9	
Number of Exceedances:	2	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005	

through January 2007. There were 142 individual samples collected with nine samples correlated with a storm event. Two of the nine samples exceeded the single sample water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID:	29589
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with 15 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID: 29590

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with nine samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

March.
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID: 29592

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with 15 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.

Temporal Representation: Samples were collected weekly from November 2005 through January 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID: 29593

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 9

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with nine samples correlated with a storm event. None of the nine samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road		
LOE ID:	29585	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	142	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with none exceeding the shellfish single sample maximum water quality objective for total coliform.	
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.	
SWAMP Data:	Non-SWAMP	

Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road	

LOE ID:	29586
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with 15 monthly goemeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID:	29587
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with nine samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID:	29588
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	142
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected with no samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID:	74795
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	152
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 152 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Salt Creek Beach site.

Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID: 74796

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 152
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 152 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Salt Creek Beach site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road

LOE ID: 74797

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 171
Number of Exceedances: 13

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road to determine beneficial use support and results are as follows: 13 of 171 samples exceed the criterion for Coliform, Total.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road was collected at 1 monitoring site [South End of Ritz Cove]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road	

LOE ID:	74798
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	152
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 152 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Salt Creek Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43039, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road	

LOE ID:	30568
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the City of Dana Point from a November 2005 through January 2007. There were 142 individual samples collected of which 133 are dry weather (AB 411) samples with three samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken at a sampling station located south of the Salt Creek outlet at Salt Creek Service Road (station id S2) Lat/Long: 33.47926/-117.72423.
Temporal Representation:	Samples were collected weekly from November 2005 through January 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive](#)
Water Body ID: CAC9011400020090505124341
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43466	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, one of the 229 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. one of the 229 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive	

LOE ID:	31073
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	30296
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Dana Point HSA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Dana Point HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID: 77619

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 121
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Zero of the 121 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive.
Temporal Representation: The samples were collected from January 2008 through August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID: 31074

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zeroexceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	31075
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	74799
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Table Rock site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	29190
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	930
Number of Exceedances:	21
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 930 individual samples collected. From the 930 samples, 21 exceeded the single sample maximum water quality objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	29228
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 931 individual samples collected and 108 monthly geomeans calculated. From the 108 geomeans, none exceeded the geomean water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	29227
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 931 individual samples collected. For the period between March 2002 and December 2007, 51 samples could be correlated with a storm event. From the 51 samples two exceeded the single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive	

LOE ID: 29203

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 931
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 931 individual samples collected and two of those samples exceeded the single sample maximum water quality objective for fecal coliform.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive	

LOE ID:	29141
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	929
Number of Exceedances:	34
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 929 individual samples collected with 34 exceeding the shellfish single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	29147
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	11

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 930 individual samples collected. For the period between March 2002 and December 2007, 51 samples could be correlated with a storm event. From the 51 storm event samples, 11 exceeded the single sample maximum water quality objective for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive	

LOE ID:	29140
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	19
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 929 individual samples collected. For the period between March 2002 through December 2007 51 samples could be associated with storm events. Of those 51 samples 19 exceeded the shellfish single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of

	interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2006; however, rainfall data is only available from March 2002 through December 2006.
Environmental Conditions:	
QAPP Information:	County of Orange Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	29146
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 930 individual samples collected and 108 monthly geomeans calculated. From the 108 geomeans, only one exceeded the geomean water quality objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID: 29242

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 929
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 929 individual samples collected and none exceeded single sample maximum water quality objective for total coliform.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

LOE ID:	29238
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 929 individual samples collected. Between March 2002 and December 2007, 51 samples were associated with storm events. None of the 51 samples exceeded the single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

LOE ID:	29235
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 929 individual samples collected and 108 monthly geomeans calculated. None of the 108 geomeans exceeded the geomean water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Table Rock Drive, station id S6, in the Dana Point HSA. Lat/Long: 33.50339/-117.74719.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID:	74825
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Table Rock site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID: 74824

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 142
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive to determine beneficial use support and results are as follows: 1 of 142 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive was collected at 1 monitoring site [Table Rock]
Temporal Representation: Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43466, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive

Region 9

LOE ID: 74823

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Table Rock site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach](#)
Water Body ID: CAC9011400020090505124705
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44731	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, zero of the 229 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, zero of the 229 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID:	30295
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Dana Point HSA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Dana Point HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID:	77620
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 121 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID:	31078
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID:	29243
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. Beach monitoring data was collected by the County of Orange. There were 930 individual samples collected with 108 monthly geomeans calculated. From the 108 monthly geomeans, none exceeded the water contact recreation geomean water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID:	29138
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	930
Number of Exceedances:	36
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 930 individual samples. From the 930 samples, 36 exceeded the single sample maximum water quality objective for shellfish harvesting.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

LOE ID:	29240
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	930
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 930 individual samples. Of the 930 samples, none exceeded the water contact recreation single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event

was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

LOE ID: 29239

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 51
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 930 individual bacteria samples were collected. From March 2002 to December 2007, 51 samples were correlated with storm events. Of the 51 storm event samples, none exceeded the water contact recreation single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the objectives are:

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

March.
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

Region 9

LOE ID: 29229

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 930
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples included 930 individual bacteria samples and 108 monthly geomeans were calculated. From the 930 samples, only one exceeded the water contact recreation single sample maximum water quality objective for fecal coliform.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

Region 9

LOE ID: 29202

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 930 individual samples collected. For the period between March 2002 and December 2007, 51 samples were correlated with storm event samples and none exceeded the water contact recreation single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach		
LOE ID:	31077	
Pollutant:	Fecal Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	56	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56	

Data Reference:	geomeans zero exceeded the geomean water quality objective Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

LOE ID:	29199
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples included 930 individual bacteria samples and 108 monthly geomeans were calculated. From the 108 geomeans, none exceeded the water contact recreation geomean water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA.

Lat/Long: 33.49756/-117.74138.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

Region 9

LOE ID: 29191

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 51

Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 938 individual samples collected. Between March 2002 and December 2007, 51 samples were associated with storm events. From the 51 samples, 11 exceeded the water contact recreation single sample maximum water quality objective for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

**Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach****Region 9**

LOE ID:	74829
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Thousand Steps Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach****Region 9**

LOE ID:	74828
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	142
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach to determine beneficial use support and results are as follows: 1 of 142 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100

Objective/Criterion Reference: mL.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach was collected at 1 monitoring site [Thousand Steps Beach]

Temporal Representation: Data was collected over the time period 1/3/2008-8/30/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID: 74827

Pollutant: Fecal Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121
 Number of Exceedances: 0

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Zero of the 121 geomeans exceeded the objective.
 Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected at the Thousand Steps Beach site.
 Temporal Representation: Samples were collected from January 2008 to August 2010.
 Environmental Conditions:
 QAPP Information: The samples were collected for the beach watch program.
 QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID: 74826

Pollutant: Enterococcus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121
 Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Thousand Steps Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach	

LOE ID:	29193
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	938
Number of Exceedances:	26
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 938 individual samples collected with 26 exceeding the water contact recreation single sample maximum water quality objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

Region 9

LOE ID:	29192
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 938 individual samples collected and 108 monthly geomeans were calculated. From the 108 geomeans, none exceeded the water contact recreation geomean water quality objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

Region 9

LOE ID:	31076
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans one exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objective is: Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44731, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach

Region 9

LOE ID:	29133
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 930 individual samples. For the period between March 2002 and December 2007, 51 samples were associated with storm events. Of the 51 storm event samples, 16 exceeded the single sample maximum water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Thousand Steps Beach, station id S4, in the Dana Point HSA. Lat/Long: 33.49756/-117.74138.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon](#)
Water Body ID: CAC9011200020090505110014
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44508	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 11 of the 367 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 11 of the 367 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon	

LOE ID:	29314
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	939
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 939 single samples were collected with 15 samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	29315
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 939 single samples were collected with 108 monthly goemeans calculated. Of the 108 geomeans, none exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon	

LOE ID: 29316

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 50
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 939 single samples were collected. From March 2002 through December 2007, 50 samples were correlated with storm events. Of the 50 samples, six exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

QAPP Information: March.
Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID: 29325

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
Number of Exceedances: 204

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: For the period from January 2000 to December 2006, there were and 204 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data Reference: Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
[County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

Objective/Criterion Reference: (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Emerald Bay, Crescent Bay, Laguna Main Beach, Hotel Laguna, Bluebird Canyon, Victoria Beach and Blue Lagoon. The posting covers 4.4 miles of beach shoreline.

Temporal Representation: The beach closures covers the time frame of January 2000 -December 2006.

Environmental Conditions:
QAPP Information: Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	29309
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	939
Number of Exceedances:	108
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 939 single samples were collected with 108 exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon	

LOE ID:	29310
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 939 single samples. Between March 2002 and December 2007, 51 samples were correlated with storm events. Of the 51 samples, 18 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	29311
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	939
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 939 individual samples with three exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.

Temporal Representation:

Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

LOE ID: 29276

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 51

Number of Exceedances: 26

Data and Information Type:

Data Used to Assess Water Quality:

PWS pathogen monitoring (ambient water)

Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 939 individual samples collected with 51 samples correlated with storm events. Of the 51 samples, 26 exceeded single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:

[Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.

Temporal Representation:

Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

QAPP Information: March.
Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID: 29296

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 939 single samples were collected with 108 monthly geomeans calculated. Of the 108 geomeans, 11 exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID: 29280

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 939

Number of Exceedances:	134
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 939 individual samples collected with 134 exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon	

LOE ID:	29312
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 939 individual samples with 108 monthly geomeans calculated. Of the 108 geomeans, none exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon	

LOE ID:	29313
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. From March 2002 through December 2007, 51 samples correlated with storm events. Of the 51 samples, four exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March. Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon
Region 9

LOE ID:	74880
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site BLUBRD, Coastal Stormdrain at Bluebird Canyon Drive (surfzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon
Region 9

LOE ID:	31079
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of

Data Reference:	April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective. Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	30301
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Laguna Beach HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Laguna Beach HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID: 31080

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Orange County collected Beach monitoring data within the time period from January 1999 through December 2006.
A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID: 31081

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	77624
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	121
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Three of the 121 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria

objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon.

Temporal Representation: The samples were collected from January 2008 through August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

LOE ID: 74881

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: None of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Bluebird Canyon Drive (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

LOE ID: 74882

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bluebird Canyon site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	74883
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Coastal Stormdrain at Bluebird Canyon Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

LOE ID: 74901

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 149
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from site BLUBRD, Coastal Stormdrain at Bluebird Canyon Drive (surfzone upcoast and downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to June 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

LOE ID: 74902

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121
Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bluebird Canyon site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	74903
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	142
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon to determine beneficial use support and results are as follows: 5 of 142 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon was collected at 1 monitoring site [Bluebird Canyon]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	74904
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Bluebird Canyon Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID:	74905
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from site BLUBRD, Coastal Stormdrain at Bluebird Canyon Drive (surfzone upcoast and downcoast).
Temporal Representation: The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44508, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon

Region 9

LOE ID: 74906
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 121
Number of Exceedances: 0
Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 121 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Samples were collected at the Bluebird Canyon site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel](#)
Water Body ID: CAC9011200020090505105553
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49812	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49812, Arsenic	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel	

LOE ID: 74976
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved
Beneficial Use: Marine Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 8 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from station LB-4d.
Temporal Representation:	The sample was collected on 12/15/2008.
Environmental Conditions:	The sample is representative of wet conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49813	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49813, Copper
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 74977

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality: The sample did not exceed the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The sample was collected from station LB-4d.
Temporal Representation: The sample was collected on 12/15/2008.
Environmental Conditions: The sample is representative of wet conditions.
QAPP Information: Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

DECISION ID 49814
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of One samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49814, Lead

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID:	75005
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from station LB-4d.
Temporal Representation:	The sample was collected on 12/15/2008.
Environmental Conditions:	The sample is representative of wet conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49815

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One sample exceed the Water Quality Objective for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Objective for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49815, Nickel

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID:	75006
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	Water Board staff assessed Orange County Stormwater Program data for Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel to determine beneficial use support and results are as follows: Zero of One samples exceed the criterion for Nickel.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from station LB-4d.
Temporal Representation:	The sample was collected on 12/15/2008.
Environmental Conditions:	The sample is representative of wet conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

DECISION ID	49817	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel		

Pollutant: Nitrogen, ammonia (Total Ammonia)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49817, Nitrogen, ammonia (Total Ammonia)	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel	

LOE ID: 75007

Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Marine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: The single sample did not exceed the objective for ammonia.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Ocean Plan objective for total ammonia as nitrogen is a moving 6-month median of 600 ug/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The sample was collected at Laguna Avenue.
Temporal Representation: The sample was collected on 12/15/08.
Environmental Conditions:
QAPP Information: A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	49819	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel		

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49819, Selenium	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel	

LOE ID: 75008
Pollutant: Selenium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from station LB-4d.
Temporal Representation:	The sample was collected on 12/15/2008.
Environmental Conditions:	The sample is representative of wet conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49820	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49820, Silver

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID:	75009
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 0.7 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from station LB-4d.
Temporal Representation:	The sample was collected on 12/15/2008.
Environmental Conditions:	The sample is representative of wet conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49821

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49821, Zinc

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID:	75035
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from station LB-4d.
Temporal Representation:	The sample was collected on 12/15/2008.
Environmental Conditions:	The sample is representative of wet conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

44485

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>Nine lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 12 of the 246 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the use of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Including the latest data, 12 of the 246 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the use of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel		
LOE ID:	75033	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	149	
Number of Exceedances:	0	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	None of the 149 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.	
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009	
Evaluation Guideline:		

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Laguna Avenue (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 75034

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Laguna Avenue (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 75032

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	144
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Laguna Beach HSA, at Projection at Laguna Hotel to determine beneficial use support and results are as follows: 4 of 144 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Laguna Beach HSA, at Projection at Laguna Hotel was collected at 1 monitoring site [Laguna Hotel]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID:	77963
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	123
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 123 samples exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Laguna Beach HSA, at Projection at Laguna Hotel was collected at 1 monitoring site [Laguna Hotel]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID: 31096

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Orange County collected Beach monitoring data within the time period from January 1999 through December 2006.
A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID: 31095

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	31094
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans seven exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period

Objective/Criterion Reference:	(SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	75004
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Laguna Avenue (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions: QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	75003
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Laguna Avenue (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	74979
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality

Objective/Criterion Reference:	Control Plan for the San Diego Basin. California Ocean Plan. Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Laguna Avenue (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel	

LOE ID:	74978
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Laguna Avenue (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel	

LOE ID:	29302
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange January 1999 through December 2007. A total of 919 single samples were collected. Between March 2002 and December 2007, 51 samples were correlated with a storm event. Of those 51 samples, three exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	29301
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 919 single samples were collected with 108 monthly geomeans calculated. Of those 108 geomeans, none exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	29300
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	919
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 919 single samples were collected with 13 samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 29299

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 51
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 918 single samples. Between March 2002 and December 2007, 51 samples were correlated with a storm event. Of those 51 samples, 3 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

March.
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 29298

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 918 single samples with 108 monthly geomeans calculated. Of the 108 geomeans, none exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 29297

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 918

Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 918 single samples were collected with 4 samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	29285
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 919 single samples were collected and 108 geomeans calculated. Of the 108 geomeans, 12 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 29278

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 918
Number of Exceedances: 113

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 918 single samples with 113 samples exceeding the single sample water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID: 29289

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	919
Number of Exceedances:	80
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 919 single samples were collected with 80 samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	29287
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	20
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 919 single samples were collected with 51 samples were correlated with a storm event. Of the 51 samples, 20 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

Region 9

LOE ID:	29323
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	204
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 204 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the

Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Emerald Bay, Crescent Bay, Laguna Main Beach, Hotel Laguna, Bluebird Canyon, Victoria Beach and Blue Lagoon. The posting covers 4.4 miles of beach shoreline.

Temporal Representation:

The beach posting covers the time frame of January 2000 -December 2006.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44485, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel

LOE ID: 29274

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 51
Number of Exceedances: 28

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 918 single samples were collected. Between March 2002 and December 2007, 51 samples were correlated with a storm event. Of those 51 samples, 28 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Laguna Hotel (the projection of the hotel), station id S16, in the Laguna HSA. Lat/Long: 33.54087/-117.78361.

Temporal Representation:

Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event

was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach](#)
Water Body ID: CAC9011200020090505110718
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44471 **Region 9**
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, two of 368 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, two of 368 samples exceeded the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID: 29324
Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	2555
Number of Exceedances:	204
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 204 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Emerald Bay, Crescent Bay, Laguna Main Beach, Hotel Laguna, Bluebird Canyon, Victoria Beach and Blue Lagoon. The posting covers 4.4 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach		
LOE ID:	74950	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	122	
Number of Exceedances:	0	
Data and Information Type:	Not Specified	
Data Used to Assess Water Quality:	Zero of the 122 geomeans exceeded the objective.	
Data Reference:	Data for Region 9 Beach Watch.	
SWAMP Data:	Non-SWAMP	

Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Victoria Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	29307
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with 108 monthly geomean calculated. None of the 108 goemeans exceeded the fecal coliform geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	29308
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with 51 associated with storm events. Two of the 51 samples exceeded the fecal coliform water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	29288
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51

Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with 51 samples correlated with storm events. Of the 51 samples, 11 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2006; however, rainfall data is only available from March 2002 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	29284
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with 108 monthly geomeans calculated. Of the 108 geomeans, only 2 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	29270
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples. Of the 911 samples, 51 were associated with a storm event. Fifteen of the 51 samples exceeded the shellfish single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006. Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.

Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	29303
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	911
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with two exceeding the single sample maximum for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	29304
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples and 108 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Lagunita Place, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	29305
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with 51 samples correlated with a storm event. Two of the 51 samples exceeded the total coliform single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	29281
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	911
Number of Exceedances:	44
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples collected with 44 exceeding the shellfish single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID: 29282

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 911
Number of Exceedances: 46

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with 46 samples exceeding the single sample maximum water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID: 31101

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	31102
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	74926
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DUMOND, Coastal Stormdrain at Dumond Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

Region 9

LOE ID:	74927
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Dumond Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

Region 9

LOE ID:	74928
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 122 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Victoria Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	74929
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DUMOND, Coastal Stormdrain at Dumond Drive (surzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach	

LOE ID:	74930
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Dumond Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	74931
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 122 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Victoria Beach site.

Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID: 30304

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Laguna Beach HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Laguna Beach HSA, at Lagunita Place' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Laguna Beach HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID: 31100

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56
Number of Exceedances: 1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans one exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Lagunita Place, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	77625
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 122 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach**

LOE ID:	74947
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	143
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach to determine beneficial use support and results are as follows: 1 of 143 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach was collected at 1 monitoring site [Victoria Beach]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach**

LOE ID:	74948
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	1

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 149 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DUMOND, Coastal Stormdrain at Dumond Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	74949
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Dumond Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring

Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44471, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach

LOE ID:	29306
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	911
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 911 individual samples with four samples exceeding the fecal coliform single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dumond Dr, station id S14, in the Laguna HSA. Lat/Long: 33.51919/-117.76302.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach](#)
Water Body ID: CAC9011200020090505104552
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44695	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; due to restoration activities
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Using the latest data collected in 2008 and 2009, zero of 17 samples exceed the water quality criteria for geomean of total coliform of 1000/100ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two diversion systems were installed upstream of the subject beach in 2007 to improve beach water quality especially during AB411 period. Using the latest data collected in 2008 and 2009, zero of 17 samples exceed the water quality criteria for geomean of total coliform of 1000/100ml, and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach	

LOE ID:	29317
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	459
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 459 samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	75066
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 35 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Laguna Main Beach site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID: 29319

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 49
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 459 samples were collected. Between March 2002 and December 2007, 49 samples were correlated with a storm event. Of the 49 samples, only one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	29320
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	449
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 449 samples were collected with 10 exceeding the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	29321
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 449 samples were collected with 107 geomeans calculated. Of the 107 geomean, only one exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	29322
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 449 samples were collected. Between March 2002 and December 2007, 49 samples were correlated with a storm event. Of the 49 samples, five exceeded the single sample maximum water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long:

33.54244/-117.78659.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach	

LOE ID: 29326

Pollutant: Indicator Bacteria
 LOE Subgroup: Health Advisories
 Matrix: -N/A
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
 Number of Exceedances: 204

Data and Information Type: PWS pathogen monitoring (ambient water)
 Data Used to Assess Water Quality: For the period from January 2000 to December 2006, there were and 204 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Emerald Bay, Crescent Bay, Laguna Main Beach, Hotel Laguna, Bluebird Canyon, Victoria Beach and Blue Lagoon. The posting covers 4.4 miles of beach shoreline.

Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	29275
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	49
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 459 single samples were collected. Between March 2002 and December 2007, 49 samples correlated with a storm event. Of the 49 samples, nine exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	29290
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	447
Number of Exceedances:	23
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 447 samples were collected with 23 exceeding the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach**

LOE ID:	29279
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	459
Number of Exceedances:	39
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 459 single samples with 39 samples exceeding the single sample

Data Reference:	water quality objective. Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	29294
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 447 samples were collected. Between March 2002 and December 2007, 49 samples were associated with a storm event. Of the 49 samples, 11 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation: Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID: 29295

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 106

Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 447 samples were collected and 106 monthly geomeans calculated. Of the 106 geomeans, five exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline: Guideline Reference:

Spatial Representation: Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	31097
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans 15 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach**

LOE ID:	31099
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999

	through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	30305
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Laguna Beach HSA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Laguna Beach HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified

Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified

Temporal Representation: Unspecified

Environmental Conditions: Unspecified

QAPP Information: Unspecified

QAPP Information Reference(s): [Placeholder reference pre-2006 303\(d\)](#)

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID: 31098

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Orange County collected Beach monitoring data within the time period from January 1999 through December 2006.
A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID: 77626

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 35 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach.
Temporal Representation:	The samples were collected from January 2008 through October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	81135
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 35 geomeans collected during the AB411 period exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Laguna Main Beach site.
Temporal Representation:	Samples were collected from April 2008 to October 2009.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID: 75036

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 149
Number of Exceedances: 5

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Five of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Laguna Canyon Channel (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID: 75037

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 7

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Seven of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values

Data Reference:	was used for the geomean calculation. Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Laguna Canyon Channel at Main Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	75038
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 35 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Laguna Main Beach site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	75060
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Laguna Canyon Channel(surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	75061
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Laguna Canyon Channel at Main Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation: The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID: 75062
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 35
Number of Exceedances: 0
Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 35 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: Samples were collected at the Laguna Main Beach site.
Temporal Representation: Samples were collected from January 2008 to October 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID: 75063
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 58
Number of Exceedances: 3

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach to determine beneficial use support and results are as follows: 3 of 58 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach was collected at 1 monitoring site [LAGUNA MAIN BEACH]
Temporal Representation:	Data was collected over the time period 1/3/2008-10/27/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

LOE ID:	75064
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from LB-3 and Mainbc, Laguna Canyon Channel (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	75065
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Laguna Canyon Channel at Main Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44695, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach

Region 9

LOE ID:	29318
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 459 samples were collected and 108 geomeans calculated. None of the 108 geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Main Beach, station id OLB00, in the Laguna HSA. Lat/Long: 33.54244/-117.78659.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

DECISION ID	49823	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exhibited water Toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exhibited water Toxicity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49823, Toxicity	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach	

LOE ID:	74662
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the one samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station LB-3u Laguna Canyon Channel.
Temporal Representation:	The sample was collected in February 2010.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek](#)
Water Body ID: CAC9012000020090505154613
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43790	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Natural Sources | Source Unknown | Unknown Nonpoint Source | Urban Runoff/Storm Sewers
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 3.2 of the Listing Policy. Under Section 3.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section [NUMBER] of the Policy.
2. The data used satisfies the data quantity requirements of section NUMBER of the Policy.
3. With the latest data, 108 out of 181 and 70 out of 149 single samples exceed the water quality objective for enterococcus for geomean and SSM criteria, respectively, for REC-1 protection, 33 of 181 geomean samples exceed the water quality objective for fecal coliform for REC-1, and 45 of 57 samples exceed the WQO for total coliform for SHELL, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek	

LOE ID: 74910

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	22
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-two of the 4149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB5, North Beach Creek at Doheny State Beach (surfzone upcoast and downcoast).
Temporal Representation:	The samples were collected in from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

Region 9

LOE ID:	74890
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	22
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty two of the 43 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at the North Beach site.
Temporal Representation: Samples were collected from January 2008 to October 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

Region 9

LOE ID: 74912

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 43
Number of Exceedances: 3

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Three of the 43 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the North Beach site.
Temporal Representation: Samples were collected from January 2008 to October 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

Region 9

LOE ID: 74911

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 30

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Thirty of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from North Beach Creek at Doheny State Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek	

LOE ID:	74889
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	86
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eighty-six of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from North Beach Creek at Doheny State Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

LOE ID:	74888
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	70
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seventy of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB5, North Beach Creek at Doheny State Beach (surzone upcoast and downcoast).
Temporal Representation:	The samples were collected in from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek**

LOE ID:	77640
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	57
Number of Exceedances:	45
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Forty-five of the 57 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for

human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek at stations North Beach and North Beach Creek.

Temporal Representation:

The samples were collected from January 2008 through October 2009.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

LOE ID: 30310

Pollutant: Indicator Bacteria

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Lower San Juan HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Lower San Juan HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information: unspecified

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

LOE ID:	74936
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 42 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the North Beach site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

Region 9

LOE ID:	74935
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	20
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from North Beach Creek at Doheny State Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek	

LOE ID:	74934
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 149 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB5, North Beach Creek at Doheny State Beach (surzone upcoast and downcoast).
Temporal Representation:	The samples were collected in from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43790, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek	

LOE ID:	74933
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	94
Number of Exceedances:	53
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek to determine beneficial use support and results are as follows: 53 of 94 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek was collected at 2 monitoring sites [NORTH BEACH, NORTH BEACH CREEK]
Temporal Representation:	Data was collected over the time period 1/3/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID	49840	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Water Quality Criteria Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 49840, Chlorpyrifos**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek**

LOE ID:	74886
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The Reporting Limit of 10 ng/L is higher than the criteria of 9ng/L which makes the data not usable.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Sample was collected at site DSB5-d from Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek.
Temporal Representation:	Sample was collected in December of 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID**49841****Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek**

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49841, Diazinon

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

LOE ID:	74887
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One sample did not exceed the maximum concentration for Diazinon criteria of 820.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Sample was collected at site DSB5-d from Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek.
Temporal Representation:	Sample was collected in December of 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49842, Malathion	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek	
LOE ID:	74913
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One sample tested for Malathion did not exceed the maximum concentration for Malathion of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be

Objective/Criterion Reference:	degraded. (2009 Ocean Plan) California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline: Guideline Reference:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L. Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Sample was collected at site DSB5-d from Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek.
Temporal Representation:	Sample was collected in December of 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49843	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria Nitrogen, ammonia (Total Ammonia).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49843, Nitrogen, ammonia (Total Ammonia)	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek	

LOE ID:	74932
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Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample did not exceeded the water quality objective for total ammonia.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Ocean Plan objective for total ammonia as nitrogen is a 6-month median of 600 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at station DSB5.
Temporal Representation:	The sample was collected on 12/15/08.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49844	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exhibited water toxicity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49844, Toxicity

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek

LOE ID:	74954
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for water toxicity. One of the one samples exhibited statistically and biologically significant toxicity. The toxicity tests include Mysid Biomass and Survival.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations DSB5d North Beach Creek.
Temporal Representation:	The sample was collected in December 2008.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground](#)
Water Body ID: CAC9013000020090505155824
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43665	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 3.2 of the Listing Policy. Under section 3.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 94 of 408 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and 79 of 270 samples exceed the single sample maximum WQO for enterococcus, and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	

LOE ID: 29362

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected with four exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: : Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	

LOE ID:	29360
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected and 6 samples were correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: : Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	

LOE ID:	29564
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans, none exceeding the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 30952

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans 0 exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	30956
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground**

LOE ID:	29375
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2920
Number of Exceedances:	2571
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2007, there were and 2571 beach postings

days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2007. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Beach posting data was for posting for Doheny State Park beach.
Temporal Representation: The beach posting covers the time frame of January 2000 -December 2007.

Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 30698

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 117
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected of which 117 are dry weather (AB411) samples with four exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: : Fecal coliform density shall not exceed 200 per 100ml

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 30813

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 117
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected of which 117 are dry weather (AB411) samples with none exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	74982
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Three Arch Bay site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	74983
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	285
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground to determine beneficial use support and results are as follows: 4 of 285 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground was collected at 2 monitoring sites [10000' SOUTH OUTFALL, Dana Strands - Selva Ramp]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	

LOE ID:	74984
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Doheny State Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	

LOE ID:	74985
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	147
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB4, Coastal Stormdrain at Doheny State Beach (surzone upcoast and surzone downcoast).
Temporal Representation:	The samples were collected in February 2007.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	74955
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	46
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty-six of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB4, Coastal Stormdrain at Doheny State Beach (surzone upcoast and downcoast).
Temporal Representation:	The samples were collected in February 2007.

Environmental Conditions:

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 74956

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134
Number of Exceedances: 76

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Seventy-six of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Doheny State Beach (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 74957

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero one of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Dana Strands - Selva Ramp site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	74958
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero one of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Three Arch Bay site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	74959
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB4, Coastal Stormdrain at Doheny State Beach (surzone upcoast and downcoast).
Temporal Representation:	The samples were collected in February 2007.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	

LOE ID:	74986
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Dana Strands - Selva Ramp site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 30959

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 8

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans calculated eight exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 75010

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Three Arch Bay site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	77641
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	242
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 242 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	74980
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Doheny State Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground**

LOE ID:	74981
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Dana Strands - Selva Ramp site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 29361

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected and 32 monthly geomeans calculated. None of the 32 geomeans exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: : Fecal coliform density shall not exceed 200 per 100ml

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID: 29347

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	33
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected with 33 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	29348
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. Of the 32 geomeans, 18 exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749). Samples were collected at least once a week from May 2004 through December 2006.
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	30576
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	541
Number of Exceedances:	28
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 541 are dry weather (AB411) samples with 28 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749). Samples were collected at least once a week from May 2004 through December 2006.
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground**

LOE ID:	29565
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected with none exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground**

LOE ID:	29341
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	5

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected with 6 samples correlated with a storm event. Of the 6 samples, 5 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	29329
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	123
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 123 single samples were collected with 22 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).
Temporal Representation:	Samples were collected at least once a week from January 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground

LOE ID:	29563
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 123 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego. California. Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.
 Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43665, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	

LOE ID: 29331

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 6
 Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
 Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2006. A total of 123 single samples were collected with 6 samples associated with storm events. Of those 6 samples, six exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: There is one sampling location at North Doheny State Park Campground, DSB4, in the Lower San Juan HSA. This location is found in Doheny State Beach, approximately 200 yards south of San Juan Creek, Dana Point (Latitude 33.46070, Longitude -117.67749).

Temporal Representation: Samples were collected at least once a week from January 2004 through December 2006.
 Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek](#)
Water Body ID: CAC9012000020090505155231
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44645	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources Source Unknown Unknown Nonpoint Source Urban Runoff/Storm Sewers
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 3.2 of the Listing Policy. Under Section 3.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 197 of 230 geomean samples, 116 of 230 geomean samples, and 84 of 228 geomean samples exceed the water quality objectives for enterococcus, fecal coliform, and total coliform, respectively, for the protection of REC-1 beneficial use, and 51 of 51 geomean samples exceed the WQO for total coliform for the protection of SHELL beneficial use, and these exceed the allowable frequency listed in Table [NUMBER] of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/11/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID: 75040

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	53
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty three of the 53 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the SJC Mouth site.
Temporal Representation:	Samples were collected from September 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	75041
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	34
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty-four of the 153 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from San Juan Creek Mouth (surfzone upcoast and surfzone

downcoast).
Temporal Representation: The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID: 75042
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 145
Number of Exceedances: 51
Data and Information Type: Not Specified
Data Used to Assess Water Quality: Fifty-one of the 145 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)
SWAMP Data: Non-SWAMP
Water Quality Objective/Criterion: The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)
Evaluation Guideline:
Guideline Reference:
Spatial Representation: The samples were collected from San Juan Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation: The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID: 75043
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 53

Number of Exceedances:	53
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-three of the 53 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the SJC Mouth site.
Temporal Representation:	Samples were collected from September 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	75071
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	64
Number of Exceedances:	63
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek to determine beneficial use support and results are as follows: 63 of 64 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek was collected at 1 monitoring site [SJC Mouth]
Temporal Representation:	Data was collected over the time period 9/15/2008-1/4/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	29368
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 12 samples correlated with a storm event. From the 12 samples, seven exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID:	29369
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 32 monthly geomeans calculated. From the 32 geomeans, 12 exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID:	29370
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	547
Number of Exceedances:	48
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 48 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID: 29340

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 12
Number of Exceedances: 12

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. All 12 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml

Objective/Criterion Reference: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff

because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID: 29566

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 548
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with nine samples exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID: 29351

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	548
Number of Exceedances:	128
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 128 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

**Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek**

Region 9

LOE ID:	29376
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2292
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 2292 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Bacteriological monitoring samples were collected at North Beach, 250' North of San Juan Creek, San Juan Creek/Ocean Interface, 250' South of San Juan Creek, 1000' South of Outfall, 2000' South of Outfall, 3000' South of Outfall and 4000' South of Outfall. The posting covers 1.1 miles of beach shoreline.

Temporal Representation:

The beach closures covers the time frame of January 2000 -December 2006.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:

30577

Pollutant:

Enterococcus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

536

Number of Exceedances:

116

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with 116 samples exceeding the single sample water quality objective.

Data Reference:

[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010). Samples were collected at least once a week from May 2004 through December 2006.

Temporal Representation:

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID: 29570

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 12
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 12 samples correlated with a storm event. Of the 12 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID: 29349

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	25
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans, 25 exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	29571
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans calculated. Of the 32 geomeans, seven exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	30699
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	535
Number of Exceedances:	41
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected of which 535 are dry weather (AB411) samples with 41 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID:	30960
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans two exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID:	30963
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans five exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	30814
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	536
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with seven samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	

Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	75072
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 153 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from San Juan Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	74668
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	145
Number of Exceedances:	26
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-six of the 145 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from San Juan Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	74669
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	51
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-one of the 51 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the SJC Mouth site.
Temporal Representation:	Samples were collected from September 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID:	30962
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans 13 exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The only sampling station is located at San Juan Beach Creek 1, SJC1, in the Lower San Juan HSA Doheny State Beach, Dana Point (Latitude 33.461930, Longitude -117.684010).
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID:	30311
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Lower San Juan HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Lower San Juan HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	77642
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	51
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Fifty-one of the 51 samples exceeded the objective of 70 mprn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek.
Temporal Representation:	The samples were collected from September 2008 to January 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID: 75015

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 153
Number of Exceedances: 87

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Eighty-seven of the 153 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from San Juan Creek Mouth (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44645, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Region 9

LOE ID: 75039

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 145
Number of Exceedances: 119

Data and Information Type: Not Specified
Data Used to Assess Water Quality: One hundred nineteen of the 145 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher

Data Reference:	of the two values was used for the geomean calculation. Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from San Juan Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	49846	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the Six samples exceed the Water Quality Criteria for Cadmium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of Six samples exceeded the Water Quality Criteria for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49846, Cadmium	Region 9
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Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	75011
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 1 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1d on the Pacific Coast near the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1d on 5/13/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49847	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49847, Chlorpyrifos

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	75012
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the five samples exceeded the Criteria Continuous Concentration for Chlorpyrifos of 9 ng/L. The reporting limit for the non-detect sample was 10 ng/L which is greater than the evaluation guideline, therefore these data are not of sufficient resolution to determine if water quality standards are being achieved.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek, site SJC1d.
Temporal Representation:	Samples were collected at SJC1d in 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49848

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Pollutant:

Copper

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49848, Copper

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID: 75013

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Zero of the one sample exceeded the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L (total) to protect aquatic life in marine waters.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from SJC-1d on the Pacific Coast at the mouth of San Juan Creek.
Temporal Representation: Samples were collected from SJC-1d on 5/13/2008.

Environmental Conditions:	Samples were collected from stormwater runoff on 12/27/06 and 1/24/08, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49849	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Six samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Six samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49849, Diazinon		Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

LOE ID:	75014
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved

Beneficial Use:	Marine Habitat
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Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Zero of one sample exceed the maximum concentration for Diazinon criteria of 820.0 ng/L.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	One sample was collected at Pacific Ocean Shoreline, Lower San Juan HSA, at SJC1d.
Temporal Representation:	One sample was collected at SJC1d in 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49850	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Six samples exceed the Water Quality Criteria for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Six samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49850, Lead	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	75044
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected from SJC-1d on the Pacific Coast at the mouth of San Juan Creek.
Temporal Representation:	The sample was collected from SJC-1d on 5/13/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49851	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the Six samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Six samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully

supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49851, Malathion

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	75045
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Zero of one sample exceeded the maximum concentration for Malathion of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 CA Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C.
Spatial Representation:	One sample was collected at Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek, at SJC1d.
Temporal Representation:	One sample was collected at SJC1d in 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49852

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49852, Nickel

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek

LOE ID:	75067
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of the one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 5 ug/L total nickel to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1d on the Pacific Coast at the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1d on 5/13/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/27/06 and 1/24/08, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49854	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceed the Water Quality Criteria Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the Water Quality Criteria for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49854, Selenium	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	75069
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1d on the Pacific Coast at the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1d on 5/13/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49855	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Six samples exceed the Water Quality Criteria for Silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Six samples exceeded the Water Quality Criteria for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49855, Silver	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	

LOE ID:	75070
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 0.7 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1d on the Pacific Coast at the mouth of San Juan Creek.
Temporal Representation:	Sample was collected from SJC-1d on 5/13/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49857	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Six samples exceed the Water Quality Criteria for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Six samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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LOE ID:	74671
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the one sample exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SJC-1d on the Pacific Coast at the mouth of San Juan Creek.
Temporal Representation:	Samples were collected from SJC-1d on 5/13/2008.
Environmental Conditions:	Samples were collected from stormwater runoff on 12/27/06 and 1/24/08, the remainder were dry weather samples.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground](#)
Water Body ID: CAC9013000020090505162035
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49858	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49858, Arsenic	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	

LOE ID: 74672
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Marine Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the two samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 8 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.
Temporal Representation:	Samples were collected on 12/15/2008.
Environmental Conditions:	Samples were collected from stormwater runoff.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49859	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	74673
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the two samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 1 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.
Temporal Representation:	Samples were collected on 12/15/2008.
Environmental Conditions:	Samples were collected from stormwater runoff.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

49861

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of Two samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49861, Copper	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	

LOE ID:	74696
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the two samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.
Temporal Representation:	Samples were collected on 12/15/2008.
Environmental Conditions:	Samples were collected from stormwater runoff.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49862	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Diazinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49862, Diazinon

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	74697
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One sample tested for Diazinon did not exceed the criteria of 820.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Sample was collected from Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground.
Temporal Representation:	Sample was collected in December of 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the

development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

DECISION ID	49863	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49863, Lead	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	

LOE ID:	74724
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the two samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.
Temporal Representation:	Samples were collected on 12/15/2008.
Environmental Conditions:	Samples were collected from stormwater runoff.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49864	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49864, Malathion		Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

LOE ID:	74725
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One sample tested for Malathion did not exceed the maximum concentration for Malathion of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Sample was collected from Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground.
Temporal Representation:	Sample was collected in December of 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49865	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Two samples exceeded the Water Quality Criteria for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully

supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49865, Nickel

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 74726

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the two samples exceeded the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California's Ocean Plan Table B lists 6-month median concentration of 5 ug/L to protect aquatic life in marine waters.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.

Temporal Representation: Samples were collected on 12/15/2008.

Environmental Conditions: Samples were collected from stormwater runoff.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID 49866

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

Pollutant: Nitrogen, ammonia (Total Ammonia)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49866, Nitrogen, ammonia (Total Ammonia)
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground**

Region 9

LOE ID:	74727
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample did not exceed the water quality objective for total ammonia.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Ocean Plan objective for total ammonia as nitrogen is a 6-month median of 600 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at station DSB1.
Temporal Representation:	The sample was collected on 12/15/08.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will be used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49872, Selenium

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 74728

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the two samples exceeded the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.

Temporal Representation: Samples were collected on 12/15/2008.

Environmental Conditions: Samples were collected from stormwater runoff.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	49873	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Silver.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49873, Silver	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	

LOE ID:	74729
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the two samples exceeded the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 0.7 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.
Temporal Representation:	Samples were collected on 12/15/2008.
Environmental Conditions:	Samples were collected from stormwater runoff.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49874	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exhibited water toxicity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49874, Toxicity	Region 9
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Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	74753
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for water toxicity. None of the samples exhibited statistically significant toxicity.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at stations DSB1 Coastal Stormdrain.
Temporal Representation:	The sample was collected in December 2008.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

DECISION ID	49876	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49876, Zinc

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 74754

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the two samples exceeded the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from DSB-1d and DSB-5d located on the Pacific coast within influence of North Beach Creek.

Temporal Representation: Samples were collected on 12/15/2008.

Environmental Conditions: Samples were collected from stormwater runoff.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID 44451

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised

Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 3.2 of the Listing Policy. Under Section 3.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 78 of 166 geomean samples and 72 of 271 single samples exceed the water quality objectives for enterococcus and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beach/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 30966

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	30964
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 74723

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Doheny State Beach (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground**

LOE ID: 74751

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 147 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB1, Coastal Stormdrain at Doheny State Beach (surfzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	

LOE ID:	74752
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Doheny State Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	

LOE ID:	74700
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site DSB1, Coastal Stormdrain at Doheny State Beach (surfzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	74699
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	66
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Sixty-six of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected from Coastal Stormdrain at Doheny State Beach (surfzone upcoast and surfzone downcoast).

Temporal Representation:

The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 74698

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147

Number of Exceedances: 42

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Forty-two of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected from site DSB1, Coastal Stormdrain at Doheny State Beach (surzone upcoast and surfzone downcoast).

Temporal Representation:

The samples were collected once a week from July 2006 to June 2009.

Environmental Conditions:

QAPP Information:

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 30700

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	537
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected of which 537 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	29357
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 29365

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 6 samples correlated with a storm event. From the 6 samples, one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml

Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground**

LOE ID:	29567
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with none exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground**

LOE ID:	29568
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	29366
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 32 geomeans calculated. From the 32 geomeans, one exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	29513
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 32 geomeans calculated. From the 32 geomeans, one exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	29332
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 6 samples correlated with a storm event. From the 6 samples, 4 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	29377
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2920
Number of Exceedances:	2571
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2007, there were and 2571 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2007. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report. 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations. Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The beach postings were for all of Doheny State Park beach.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	

LOE ID:	29344
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 32 geomeans calculated. From the 32 geomeans, 12 exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	29345
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	30
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 30 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground**

LOE ID: 29346

Pollutant: Enterococcus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6

Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 6 samples correlated with storm events. From the 6 samples, 6 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground**

LOE ID: 29330

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	124
Number of Exceedances:	20
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 124 single samples were collected with 20 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	30578
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	538
Number of Exceedances:	38
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected of which 538 are dry weather (AB411) samples with 38 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 30965

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20

Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected within the time frame of April 1st to October 31st (AB411 data) during the aforementioned time period. Of the 20 geomeans four exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) during the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44451, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID: 30815

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	538
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 538 are dry weather (AB411) samples with none exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling at South Doheny State Park Campground, DSB1, in the Lower San Juan HSA. This location is found in Doheny State Beach, Dana Point.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

DECISION ID	49860	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of Zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49860, Chlorpyrifos

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground

LOE ID:	74695
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The Reporting Limit of 10 ng/L is higher than the criteria of 9ng/L which makes the data not usable.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. (2009 Ocean Plan)
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Sample was collected from Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground.
Temporal Representation:	Sample was collected in December of 2008.
Environmental Conditions:	According to the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010, samples were collected during the dry season and storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road](#)
Water Body ID: CAC9013000020090505160142
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43737	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 67 of 166 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 67 of 166 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID: 30636
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected of which 121 are dry weather (AB411) samples with 15 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID:	30737
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	120
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 126 single samples were collected of which 120 are dry weather (AB411) samples with three exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB,

2005)

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling location located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID: 30993

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml over a 30 day period

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling location located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.

Temporal Representation: Samples were collected at least once a week within the time period from May 2004 through December 2006.

The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period. AB411 excludes the consideration of wet weather data.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID: 30994

Pollutant: Enterococcus
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
 Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
 Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: There is one sampling located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.

Temporal Representation: Samples were collected at least once a week within the time period from May 2004 through December 2006.
 The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
 QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID: 30992

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID:	74923
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	55
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-five of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Capistrano Beach (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID: 74924

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 31

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Thirty-one of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from site CSBBR1, Coastal Stormdrain at Capistrano Beach(surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to June 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID: 74941

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CSBBR1, Coastal Stormdrain at Capistrano Beach(surzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID:	74942
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Capistrano Beach (surfzone

Temporal Representation:	upcoast and surfzone downcoast).
Environmental Conditions:	The samples were collected once a week from July 2006 to 2009.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID:	74943
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 147 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CSBBR1, Coastal Stormdrain at Capistrano Beach(surzone upcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID:	74944
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrinat Capistrano Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID:	29373
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	1307
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2007 there were and 1307 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion

close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Beach posting data covers all Capistrano County Beach.

Temporal Representation:

The beach posting covers the time frame of January 2000 -December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID: 29336

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 127
Number of Exceedances: 16

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 16 exceeding the single sample water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From The Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: There is one sampling location at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID: 29337

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 6 of those samples correlated with a storm event. From the 6 samples 3 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID:	29562
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	127
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID:	29350
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans calculated. From the 32 geomeans, 12 exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID: 29364

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml

Objective/Criterion Reference: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID: 29367

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 126 single samples were collected with three exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID:	29569
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling located at South Capistrano Beach at Beach Road, CSBRR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID:	29511
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 6 correlated with a storm event. None of the 6 sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
	Comparison to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	There is one sampling location located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HSA at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID:	29363
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 126 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road**

LOE ID:	29333
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 6 samples correlated with a storm event. From the 6 samples, 4 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From The Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location located at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HSA at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road**

LOE ID:	29339
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 18 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road

LOE ID:	30842
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected of which 121 are dry weather (AB411) samples with one of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano Beach at Beach Road, CSBBR1, in the Lower San Juan HAS at Capistrano Beach/Dana Point. Lat/Long: 33.45311/-117.66536.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43737, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	

LOE ID:	30309
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Lower San Juan HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Lower San Juan HSA, at South Capistrano Beach at Beach Road' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Lower San Juan HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River](#)
Water Body ID: CAC9111100020090505134454
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43385	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources Source Unknown Unknown Nonpoint Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. Including latest data, 38 of the 203samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use, and 109 of 369 exceed the WQO for total coliform of a single sample maximum of 70/100 ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including latest data, 38 of the 203samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use, and 109 of 369 exceed the WQO for total coliform of a single sample maximum of 70/100 ml for the protection of SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	31131
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 114 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. Four of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID:	31132
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 112 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	30352
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Tijuana HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Tijuana HU and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID:	30873
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	29
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected of which 189 are dry weather (AB411) samples with 29 of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of the Tijuana River, San Diego, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID:	75074
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	158
Number of Exceedances:	30
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty of the 158 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected three fourths of a mile north of Tijuana River site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	29382
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 20 samples correlated with a storm event. Eleven of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 3/4 mi North of the Tijuana River, Imperial Beach, California. Station identification number is IB-040.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

LOE ID: 29381

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 209

Number of Exceedances: 40

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 40 samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 3/4 mi North of the Tijuana River, San Diego, California. Station identification number is IB-040.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

LOE ID:	29380
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	20
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 20 samples correlated with a storm event. Sixteen of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River**

LOE ID:	29379
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	209
Number of Exceedances:	67
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 67 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, San Diego, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

LOE ID:	75077
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	157
Number of Exceedances:	15
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifteen of the 157 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected three fourths of a mile north of Tijuana River site.

Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID: 75076

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 160
Number of Exceedances: 42

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed bw data for Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River to determine beneficial use support and results are as follows: 42 of 160 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River was collected at 1 monitoring site [3/4 mi. N of TJ River]

Temporal Representation: Data was collected over the time period 1/2/2008-8/24/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID: 75075

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 158
Number of Exceedances: 11

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Eleven of the 158 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected three fourths of a mile north of Tijuana River site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	29440
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were two beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Spatial Representation:	Bacteriological monitoring samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	77688
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	156
Number of Exceedances:	61
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Sixty-one of the 156 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	29388
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	45
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 207 single samples were collected and 45 geomeans calculated. Five of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID:	29387
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 45 monthly geomeans calculated. Seven of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

**Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River**

Region 9

LOE ID: 29386

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 26 samples correlated with a storm event. Eleven of the 26 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.

Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	29385
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	209
Number of Exceedances:	35
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 35 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of the Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	

LOE ID:	29384
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 207 single samples were collected with 20 samples correlated with a storm event. Eleven of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of the Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID:	29383
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	207
Number of Exceedances:	38
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004

	through December 2007. A total of 207 single samples were collected with 38 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

LOE ID:	29389
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected with 45 monthly geomeans calculated. Eight of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

LOE ID:	30766
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	27
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 207 single samples were collected of which 187 are dry weather (AB411) samples with 27 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

LOE ID:	31133
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 114 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. Two of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43385, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River

Region 9

LOE ID:	30666
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	183
Number of Exceedances:	24
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 209 single samples were collected of which 183 are dry weather (AB411) samples with 24 samples exceeding the single sample water quality

Data Reference:	objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 3/4 mi North of the Tijuana River, Imperial Beach, California. Station identification number is IB-040.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Tijuana HU, at the US Border](#)
Water Body ID: CAC9111100020090505135528
Water Body Type: Coastal & Bay Shoreline

DECISION ID 43615 **Region 9**
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Natural Sources | Source Unknown | Unknown Nonpoint Source | Urban Runoff/Storm Sewers
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 106 of 345 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 106 of 345 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Tijuana HU, at the US Border

LOE ID: 77689
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	149
Number of Exceedances:	65
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Sixty-five of the 149 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Tijuana HU, at the US Border.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at the US Border

LOE ID:	29441
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	40
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were forty beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at the North Side of the Border Fence, Imperial Beach, California.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at the US Border

LOE ID:

29400

Pollutant:

Enterococcus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

45

Number of Exceedances:

7

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 45 monthly geomeans calculated. Seven of the 45 geomeans exceeded the geomean water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID: 29399

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 45
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected and 45 geomeans calculated. Four of the 45 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID: 29398

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 45 monthly geomeans calculated. Four of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID:	29396
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	27
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 27 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID:	29395
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 13 samples correlated with a storm event. Four of the 13 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	

Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at the US Border

LOE ID:	29394
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	24
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 24 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at the US Border

LOE ID:	29393
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 13 samples correlated with a storm event. Five of the 13 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID:	29392
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	28

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 28 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID:	30670
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	179
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected of which 179 are dry weather (AB411) samples with 18 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at the US Border

LOE ID: 30770

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 179
Number of Exceedances: 20

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected of which 179 are dry weather (AB411) samples with 20 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Tijuana HU, at the US Border**

LOE ID:	30356
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Tijuana HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Tijuana HU, at the US Border' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Tijuana HU and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Tijuana HU, at the US Border**

LOE ID:	29390
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	192
Number of Exceedances:	60
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 60 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of Orange. Quality Assurance/Quality Control Manual. February 2004
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

**Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border**

Region 9

LOE ID:	29391
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	13
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 13 samples correlated with a storm event. Eleven of the 13 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID: 29397

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 13
Number of Exceedances: 9

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected with 13 samples correlated with a storm event. Nine of the 13 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID: 31120

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 107 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.

Temporal Representation: Samples were collected from April 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID: 31121

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 107 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID:	31119
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 107 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID:	30877
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	179
Number of Exceedances:	23
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 192 single samples were collected of which 179 are dry weather (AB411) samples with 23 of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Border Fence North Side, Imperial Beach, California. Station identification number is IB-010.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID: 75147

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 150
Number of Exceedances: 35

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Thirty five of the 150 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the US Border Fence site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at the US Border

Region 9

LOE ID: 75144

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 150
Number of Exceedances: 39

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Thirty nine of the 150 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected US border fence site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at the US Border	

LOE ID:	75145
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	26
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty six of the 150 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the US Border fence site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43615, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at the US Border	

LOE ID:	75146
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	153
Number of Exceedances:	46

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Tijuana HU, at Border to determine beneficial use support and results are as follows: 46 of 153 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Tijuana HU, at Border was collected at 1 monitoring site [Border Fence N side]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive](#)
Water Body ID: CAC9111100020090505131259
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44227 **Region 9**
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Natural Sources | Source Unknown | Unknown Nonpoint Source | Urban Runoff/Storm Sewers
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 38 of 219 geomean samples exceed the water quality objective for enterococcus for REC-1 and 108 of 410 samples exceed the water quality objective for SSM for SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 38 of 219 geomean samples exceed the water quality objective for enterococcus for REC-1 and 108 of 410 samples exceed the water quality objective for SSM for SHELL and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

LOE ID: 75125
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	175
Number of Exceedances:	32
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty two of the 175 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Monument Road site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	30669
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	203
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected of which 203 are dry weather (AB411) samples with 22samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.

Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive	

LOE ID:	77691
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	174
Number of Exceedances:	63
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Sixty-three of the 174 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive	

LOE ID:	29434
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	3

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 220 single samples were collected and 44 geomeans calculated. Three of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29433
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected with 44 monthly geomeans calculated. Six of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID: 29447

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
Number of Exceedances: 7

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were seven beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:	Bacteriological monitoring samples were collected at the end of Seacoast Drive, Imperial Beach, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29427
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232single samples were collected with 20 samples correlated with a storm event. Eight of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29426
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	232
Number of Exceedances:	32
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected with 32 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29425
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	20
Number of Exceedances:	14

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected with 20 samples correlated with a storm event. Fourteen of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29430
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	232
Number of Exceedances:	34
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected with 34 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation: Environmental Conditions:	Samples were collected from January 2004 through December 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29429
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 220 single samples were collected with 20 samples correlated with a storm event. Nine of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	

Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29428
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	220
Number of Exceedances:	35
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 220 single samples were collected with 35 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	31123
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 122 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29435
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected with 44 monthly geomeans calculated. Six of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of Orange. Quality Assurance/Quality Control Manual. February 2004
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	29424
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	232
Number of Exceedances:	67
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected with 67 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.

Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	31124
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 131 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	30355
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Tijuana HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Tijuana HU and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	31122
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 131 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID: 30876

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 212
Number of Exceedances: 24

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected of which 212 are dry weather (AB411) samples with 24 of those samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006](#)

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID: 30769

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 200
Number of Exceedances: 26

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 220 single samples were collected of which 200 are dry weather (AB411) samples with 26 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006](#)

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID: 75128

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	175
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 175 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the end of Seacoast Drive site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

Region 9

LOE ID:	75127
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	178
Number of Exceedances:	41
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive to determine beneficial use support and results are as follows: 41 of 178 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive was collected at 1 monitoring site [End of Seacoast Dr]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive

LOE ID:	29431
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 232 single samples were collected with 29 samples correlated with a storm event. Twelve of the 29 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at End of Seacoast Dr., San Diego, California. Station identification number is IB-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44227, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive**

LOE ID:	75126
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	174
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 174 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the end of Seacoast Drive site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Tijuana HU, at Monument Road](#)
Water Body ID: CAC9111100020090505135322
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43448	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Monument Road		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources Source Unknown Unknown Nonpoint Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 50 of 199 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1 and 115 of 351 samples exceed the SSM WQO for total coliform, and 33 of 198 geomean samples exceed the WQO for fecal coliform for REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 50 of 199 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1 and 115 of 351 samples exceed the SSM WQO for total coliform, and 33 of 198 geomean samples exceed the WQO for fecal coliform for REC-1 and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Monument Road	

LOE ID:	31129
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 107 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	30874
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	25
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected of which 180 are dry weather (AB411) samples with 25 of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	75132
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	154
Number of Exceedances:	46
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty six of the 154 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Monument Road site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	75131
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	157
Number of Exceedances:	58
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Tijuana HU, at Monument Road to determine beneficial use support and results are as follows: 58 of 157 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Tijuana HU, at Monument Road was collected at 1 monitoring site [Monument Rd.]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	75130
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	30
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty of the 153 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the Monument Road site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	75129
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	154
Number of Exceedances:	44
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty four of the 154 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Monument Road site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	77692
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	153
Number of Exceedances:	71
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Seventy-one of the 153 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Tijuana HU, at Monument Road.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Monument Road

LOE ID:	30353
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Tijuana HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Tijuana HU, at Monument Road' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Tijuana HU and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Monument Road

LOE ID:	30767
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	25
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected of which 180 are dry weather (AB411) samples with 25 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road**

Region 9

LOE ID:	31128
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 107 dry month (April through October) single samples were

	collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	29406
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 14 samples correlated with a storm event. Seven of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	<p>Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.</p> <p>Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency</p>
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. . Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	<p>County of Orange. Quality Assurance/Quality Control Manual, February 2004</p> <p>County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006</p>

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	29405
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	194
Number of Exceedances:	32
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 32 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	<p>Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency</p>
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	<p>County of Orange. Quality Assurance/Quality Control Manual, February 2004</p> <p>County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance</p>

**Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road****Region 9**

LOE ID:	29411
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 45 monthly geomeans calculated. Six of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road****Region 9**

LOE ID:	29410
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45

Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected and 45 geomeans calculated. Three of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	29409
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 45 monthly geomeans calculated. Four of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Monument Road

LOE ID: 29408

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 14

Number of Exceedances: 8

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 14 samples correlated with a storm event. Eight of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Monument Road

LOE ID: 29407

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 194
Number of Exceedances: 24

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 24 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Monument Road

LOE ID: 30667

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected of which 180 are dry weather (AB411) samples with 16 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	29442
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were two beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of

	days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Bacteriological monitoring samples were collected at the Monument Road, Imperial Beach, California.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

**Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road**

Region 9

LOE ID:	29401
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	194
Number of Exceedances:	57
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 57 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Monument Road

LOE ID: 29404

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 14
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 14 samples correlated with a storm event. Six of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID: 31130

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 107 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID: 29402

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 14 samples correlated with a storm event. Eleven of the 14 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43448, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Monument Road

Region 9

LOE ID:	29403
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	194
Number of Exceedances:	31
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 31 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Monument Rd., Imperial Beach, California. Station identification number is IB-020.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth](#)
Water Body ID: CAC9111100020090505134951
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43860	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Natural Sources | Source Unknown | Unknown Nonpoint Source | Urban Runoff/Storm Sewers
Expected TMDL Completion Date: 2019
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 83 of 215 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1, 172 of 400 samples exceed the SSM WQO for total coliform for the protection of SHELL, additionally, geomean samples also exceed allowable exceedance rates for fecal coliform and total coliform for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 83 of 215 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1, 172 of 400 samples exceed the SSM WQO for total coliform for the protection of SHELL, and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. Additionally, geomean samples also exceed allowable exceedance rates for fecal coliform and total coliform for the protection of REC-1.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth	

LOE ID: 30668
Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	200
Number of Exceedances:	53
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected of which 200 are dry weather (AB411) samples with 53 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29412
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	227
Number of Exceedances:	100
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 100 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID:	31125
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 116 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. Four of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID: 31126

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 115 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. Four of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID: 31127

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 116 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. Four of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29416
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	224
Number of Exceedances:	69
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected with 69 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29417
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected with 20 samples correlated with a storm event. Fifteen of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29418
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	227
Number of Exceedances:	68
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 68 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29419
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Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 27 samples correlated with a storm event. Fifteen of the 27 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	30768
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	204

Number of Exceedances:	54
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected of which 204 are dry weather (AB411) samples with 54 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	30354
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Tijuana HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Tijuana HU and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth	

LOE ID:	29422
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 45 monthly geomeans calculated. Thirteen of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth	

LOE ID:	29413
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	20
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 20 samples correlated with a storm event. Eighteen of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29414
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	227
Number of Exceedances:	68

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 68 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29415
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 20 samples correlated with a storm event. Fourteen of the 20 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth**

Region 9

LOE ID:	29445
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were eight beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-

contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at the Tijuana Rivermouth, Imperial Beach, California.

Temporal Representation:

The beach closures advisory the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID:

29420

Pollutant:

Total Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

45

Number of Exceedances:

11

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected with 45 monthly geomeans calculated. Eleven of the 45 geomeans exceeded the geomean water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance](#)

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	29421
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 224 single samples were collected and 45 geomeans calculated. Twelve of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	77693
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	169
Number of Exceedances:	92

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Ninety-two of the 169 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID:	75148
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	170
Number of Exceedances:	70
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seventy of the 170 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River mouth site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID:	75149
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	170
Number of Exceedances:	49
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty nine of the 170 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River mouth site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

Region 9

LOE ID:	75150
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	173
Number of Exceedances:	72
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth to determine beneficial use support and results are as follows: 72 of 173 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth was collected at 1 monitoring site [Tijuana Rivermouth]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID:	75151
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	170
Number of Exceedances:	56
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty six of the 170 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tijuana River mouth site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43860, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth

LOE ID:	30875
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	207
Number of Exceedances:	54
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 227 single samples were collected of which 207 are dry weather (AB411) samples with 54 of those samples exceeding the single sample water quality objective.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Tijuana Rivermouth, San Diego, California. Station identification number is IB-030.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo](#)
Water Body ID: CAC9063000020090520164701
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43503	Region 9
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of 79 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of 79 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo	

LOE ID:	30654
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	148

Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected of which 148 are dry weather (AB411) samples with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID:	77678
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 45 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Temporal Representation: The samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

LOE ID: 75109

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 46

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 46 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Coastal Blvd Gazebo site.

Temporal Representation: Samples were collected from April 2008 to August 2008.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

LOE ID: 75117

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 46

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality:	Zero of the 5 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Coastal Blvd Gazebo site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID:	31187
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through October 2007. A total of 148 dry month (April through October) single samples were collected with 39 dry month geomeans calculated. None of the 39 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from April 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID: 30861

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 148
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected of which 148 are dry weather (AB411) samples with one of those samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID: 31176

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through October 2007. A total of 148 dry month (April through October) single samples were collected with 39 dry month geomeans calculated. One of the 39 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from April 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID:	75118
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	55
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo to determine beneficial use support and results are as follows: 1 of 55 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo was collected at 1 monitoring site [Coast Blvd gazebo]
Temporal Representation: Data was collected over the time period 4/14/2008-8/25/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

LOE ID: 75119

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 45
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 45 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Coastal Blvd Gazebo site.
Temporal Representation: Samples were collected from April 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

LOE ID: 30754

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 112
Number of Exceedances: 2

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 114 single samples were collected of which 112 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID:	31177
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2002 through October 2007. A total of 112 dry month (April through October) single samples were collected with 30 dry month geomeans calculated. None of the 30 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.

Temporal Representation: Samples were collected from April 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID: 29661

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected with 2 samples correlated with a storm event. None of the 2 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID: 29662

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 150
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected with one sample exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.

Temporal Representation: Samples were collected from January 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID: 29667

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected with two samples correlated with a storm event. None of the samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo**

Region 9

LOE ID:	29669
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 114 single samples were collected and 26 geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID:	29673
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 18 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

LOE ID:

29663

Pollutant:

Total Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

2

Number of Exceedances:

0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected with 2 samples correlated with a storm event. None of the 2 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:

[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

LOE ID:	29664
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	114
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 114 single samples were collected with 2 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

LOE ID:	29665
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 114 single samples were collected with two samples correlated with a storm event. Neither sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID:	29666
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo

Region 9

LOE ID:	29660
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	150
Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 150 single samples were collected with 22 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Coastal Blvd Gazebo, San Diego, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo**Region 9**

LOE ID:	29668
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected with 33 monthly geomeans calculated. None of the 33 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43503, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Coastal Blvd Gazebo**Region 9**

LOE ID:	29670
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through December 2007. A total of 150 single samples were collected with 33 monthly geomeans calculated. One of the 33 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Coast Blvd Gazebo, La Jolla, California. Station identification number is EH-303.
Temporal Representation:	Samples were collected from January 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach](#)
Water Body ID: CAC9063000020090520165643
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43095	Region 9
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. With the latest data, six of the 34 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, six of the 34 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach	

LOE ID:	75253
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach was collected at 1 monitoring site [Vallecitos (NR)]
Temporal Representation:	Data was collected on a single day 2/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach

LOE ID:	29672
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were one beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations. Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach	

LOE ID:	29657
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 33 single samples were collected with 19 monthly geomeans calculated. From the 19 geomeans, none exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.
Temporal Representation:	Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach

LOE ID: 29658

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 33
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 33 single samples were collected with four samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach

LOE ID: 29659

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 33 single samples were collected with 19 geomeans calculated. Three of the 23 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach

LOE ID:	29654
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 33 single samples were collected with no samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach

LOE ID: 29655

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 20 single samples were collected with 19 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.

Temporal Representation: Samples were collected from April 1999 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach

LOE ID:	29656
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 33 single samples were collected with one samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml;
	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43095, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach	

LOE ID:	29653
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	33
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through December 2007. A total of 33 single samples were collected with six samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Vallecitos Court at La Jolla Shores Beach, La Jolla, California. Station identification number is EH-320.
Temporal Representation:	Samples were collected from April 1999 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

DECISION ID	48178	Region 9
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 9/29/07, 9/6/08 and 9/5/09 for this water body. The total weight of trash (lbs) collected on these dates was 507. However, using the metric, Coastkeeper classified this water body as low for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.3. This process is scientifically defensible and reproducible.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach

LOE ID:	75254
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 9/29/07, 9/6/08 and 9/5/09 for this water body. The total weight of trash (lbs) collected on these dates was 507. However, using the metric, Coastkeeper classified this water body as low for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	La Jolla Shores.
Temporal Representation:	Three cleanups occurred on 9/29/07, 9/6/08, and 9/5/09.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle](#)
Water Body ID: CAC9011300020090525212958
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43112	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture Municipal Point Sources Other
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: In 2006, 'Pacific Ocean Shoreline, Aliso HSA' was listed for Indicator Bacteria. For 2008, the 2006 Aliso HSA segment has been split into smaller segments that each represent an area near the sampling location of the data being assessed. 'Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach middle' is one of the sampling locations for Pacific Ocean Shoreline, Aliso HSA and is considered to be part of the original listing.

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Two hundred-one of the 994 samples exceed the water quality objective for Shellfish Harvesting. Nineteen out of 108 samples exceeded the contact recreation objective for Enterococcus, and Zero out of 108 samples exceeded the contact recreation objective for Fecal Coliform.

In LOEs 29720 and 29723, 29729, 29726 the Regional Board calculated exceedances for samples taken only during storm events. This information was not used in determining listing decisions, but is of interest to the Regional Board and has been included as additional anecdotal information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two hundred-one of the 994 samples exceed the water quality objective for Shellfish Harvesting. Nineteen out of 108 samples exceeded the contact recreation objective for Enterococcus, and Zero out of 108 samples exceeded the contact recreation objective for Fecal Coliform and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Board Review and Conclusion:

The geomeans for LOE 31082 were calculated incorrectly. State Water Board staff corrected the error.

This does not change the decision.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle**

Region 9

LOE ID:	29723
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 994 with 49 samples correlated with a storm event. From the 49 samples, seven exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle**

LOE ID:	31082
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans 0 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle**

LOE ID:	29725
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The total number of samples collected was 906. From the 906 samples, 108 monthly geomeans were calculated with none exceeding the water contact recreation geomean water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID:	29726
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline samples were collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 906. Between March 2002 and December 2007, 50 samples were correlated with storm events. From the 50 storm event samples, 15 exceeded the water contact recreation single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

LOE ID:	29727
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	982
Number of Exceedances:	119
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 982 for enterococcus. Of the 982 samples, 119 exceeded the water contact recreation single sample maximum objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

LOE ID: 29728

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108

Number of Exceedances: 19

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Shoreline monitoring data collected by the County of Orange from January 1999 through December 2007. There were 982 single samples collected for enterococcus. From the 982 samples, 108 monthly geomeans were calculated with 19 exceeding the water contact recreation objective for enterococcus.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the objectives are:

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

LOE ID:	29729
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	25
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 893 single samples collected. Between March 2002 and December 2007, 51 samples were correlated with storm events. Of the 51 storm event samples, 25 exceeded the water contact recreation single sample water quality objective for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are:
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID:	29719
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	994
Number of Exceedances:	201
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 994. From the 994 samples, 201 exceeded the single sample maximum shellfish water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID:	29720
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	49
Number of Exceedances:	33
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2006. The total number of single samples collected was 994. From March 2002 through December 2007, 49 samples were associated with storm events. Of the 49 samples, 33 exceeded the single sample maximum water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle	

LOE ID:	29721
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	994
Number of Exceedances:	16
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 994. From the 994 samples, 16 exceeded the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID: 29722

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 994 and 108 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID: 29732

Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	144
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were 144 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Goff Island Beach, Treasure Island Beach, Aliso North, Aliso Middle, Aliso South, Camel Point, Table Rock, Laguna Lido, 9th Street/1000 Steps, and Three Arch Bay. The posting covers two miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID:	31083
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID:	31084
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans three exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the objectives are:
Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

LOE ID: 30293

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Aliso HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach middle' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Aliso HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43112, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle

Region 9

LOE ID:	29724
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	906
Number of Exceedances:	49
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 906. From the 906 samples, 49 exceeded the water contact recreation single sample maximum water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the sampling station Aliso Beach Middle, station code S9, in the Aliso Beach HSA. Lat/Long: 33.50962/-117.75237.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north](#)
Water Body ID: CAC9011300020090525211559
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44397	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. With the latest data, three of the 229 samples exceeded the Water Quality Objective for enterococcus of a geomean of 35 cfu/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve lines of evidence are available in the administrative record to assess this pollutant. With the latest data, three of the 229 samples exceeded the Water Quality Objective for enterococcus of a geomean of 35 cfu/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north	

LOE ID:	29686
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	976
Number of Exceedances:	86
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by County of Orange from January 1999 through December 2007. For total coliform, 976 individual samples were collected with 86 of the samples exceeding the single sample maximum objective for shellfish harvesting.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	29691
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	975
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were a total of 975 samples collected. From the 975 samples, 14 exceeded the water contact recreation single sample maximum water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	77583
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 121 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north, Treasure Island stairs.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	74506
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Treasure Island stairs site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	74505
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	143
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north to determine beneficial use support and results are as follows: 4 of 143 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north was collected at 1 monitoring site [Treasure Island Stairs]

Temporal Representation: Data was collected over the time period 1/3/2008-8/30/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

LOE ID: 74504

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 121 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Treasure Island stairs site.

Temporal Representation: Samples were collected approximately once a week from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

LOE ID: 74493

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121

Number of Exceedances: 1

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Treasure Island stairs site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	31087
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. within any 30 day period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID: 31086

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Orange County collected Beach monitoring data within the time period from January 1999 through December 2006.
A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml. within any 30 day period

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID: 31085

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans 0 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	29690
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. For total coliform, 976 individual samples were collected. For the period of March 2002 through December 2006, 51 individual samples correlated with rainfall events. Of those 51 storm event samples, two exceeded the single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north	

LOE ID:	29689
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange January 1999 through December 2007. For total coliform, 976 individual samples were collected and 108 monthly geomeans calculated. From the 108 geomeans, none of the geomeans exceeded monthly geomean objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463

Temporal Representation:

Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

LOE ID: 29688

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 976

Number of Exceedances: 4

Data and Information Type:

Data Used to Assess Water Quality:

PWS pathogen monitoring (ambient water)

Beach monitoring data was collected by the County of Orange January 1999 through December 2007. For total coliform, 976 individual samples were collected. From the 976 samples, four samples exceeded the single sample maximum water quality objective for total coliform.

Data Reference:

[Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

[National Weather Service Forecast Office, San Diego, California. Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference:

Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463

Temporal Representation:

Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

County of Orange Quality Assessment/Quality Control document (County of Orange, 2004).

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

LOE ID:	29687
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	23
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline data was collected by County of Orange for bacteria monitoring from January 1999 through December 2007. There were a total of 976 individual samples collected. From March 2002 through December 2007, 51 samples were correlated with rainfall events. Of the 51 storm event samples, 23 exceeded the single sample maximum shellfish standard for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	29696
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 959 individual samples collected. Between March 2002 and December 2007, 51 samples were correlated with storm events. From the 51 storm event samples, 11 exceeded the water contact recreation single sample maximum objective for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	29730
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	144

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were 144 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Goff Island Beach, Treasure Island Beach, Aliso North, Aliso Middle, Aliso South, Camel Point, Table Rock, Laguna Lido, 9th Street/1000 Steps, and Three Arch Bay. The posting covers two miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	30185
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Aliso HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach north' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Aliso HSA and is considered by the Regional Board to be

applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Temporal Representation:

Environmental Conditions:

QAPP Information: Unspecified

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north	

LOE ID: 29695

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 959 individual samples collected with 108 monthly geomeans calculated. From the 108 monthly geomeans, 2 exceeded the water quality objective for enterococcus.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	29694
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	959
Number of Exceedances:	33
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 959 individual samples collected for enterococcus. Of the 959 samples, 33 exceeded the single sample maximum objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north

Region 9

LOE ID:	29693
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	4

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 975 individual samples collected. Between March 2002 and December 2007, 51 samples were correlated with storm events. Of the 51 samples, 4 exceeded the water contact recreation single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44397, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north	

LOE ID:	29692
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 975 individual samples collected and 108 monthly geomeans calculated. From the 108 geomeans, none exceeded the water contact recreation geomean water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from sampling station Aliso Beach North, station id S10, of the Aliso Beach HSA. Lat/Long: 33.51162/-117.75463.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south](#)
Water Body ID: CAC9011300020090525213500
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44198	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: In 2006, 'Pacific Ocean Shoreline, Dana Point HSA' was listed for Indicator Bacteria. For 2008, the 2006 Dana Point HSA segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach south' is one of the sampling locations for Pacific Ocean Shoreline, Dana Point HSA and is considered to be part of the original listing.

For this 2008 assessment, the Regional Board has chosen to replace the 'indicator bacteria' listing with separate assessments of the specific indicator bacteria, such as coliform, fecal coliform, and enterococcus, for removal or non-removal from the 303(d) list.

Ten lines of evidence are available in the administrative record to assess this pollutant. Sixty-eight of 974 samples exceeded the water quality objective for Shellfish Harvesting. Forty-Eight of the 959 samples exceeded the contact recreation objective for Enterococcus, Nine out of 975 samples exceeded the contact recreation objective for Fecal Coliform, and Two out of 974 samples exceeded the Evaluation Guideline for Total Coliform.

The coastal beach at this water segment is identified as an AB411 beach. To comply with the requirements of AB411 the dry weather data collected during the time frame of April 1st to October 31st is assessed using a four percent exceedance percentage, as described in section 3.3 and 4.3 of the Listing Policy. An assessment for the dry weather single geometric mean calculation was conducted and one additional line of evidence is available in the administrative record. Two of 56 geometric mean calculations exceeded the criteria for recreational use for Total Coliform, Zero out of 56 samples exceeded the objective for Enterococcus, and Fecal Coliform, and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.

In LOEs 29709 29711, 29718, 29715, and the Regional Board calculated exceedances for samples taken only during storm events. This information was not used in determining listing decisions, but is of interest to the Regional Board and has been included as additional anecdotal information. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Sixty-eight of 974 samples exceeded the Shellfish Harvesting water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Sixty-eight of 974 samples exceeded the water quality objective for Shellfish Harvesting. Forty-Eight of the 959 samples exceeded the contact recreation objective for Enterococcus, Nine out of 975 samples exceeded the contact recreation objective for Fecal Coliform, and Two out of 974 samples exceeded the Evaluation Guideline for Total Coliform and this does not exceed the allowable limit based on the application of a four percent exceedance percentage (AB411) to section 3.3 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south**

Region 9

LOE ID:	29708
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	974
Number of Exceedances:	68
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected for total coliform analysis was 974. Of the 974 samples, 68 exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

LOE ID:	31055
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans 2 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south**

LOE ID:	29710
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	974
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999

	through December 2007. The number of samples included 974 individual bacteria samples. From the 974 samples, two samples exceeded single sample maximum water quality objective for water contact recreation.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

Region 9

LOE ID:	29711
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of samples 974 individual bacteria samples were collected. From March 2002 to December 2007, 51 samples were correlated with storm events. Of the 51 storm event samples, only one sample exceeded the water contact recreation single sample maximum water quality objective for total coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
	Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south	

LOE ID:	29712
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples included 974 individual bacteria samples and 108 monthly geomeans were calculated. From the 108 geomeans, , none exceeded the water contact recreation geomean water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006. Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.

Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south	

LOE ID:	29713
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	975
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 975 samples were collected. From the 975 samples, 9 exceeded the water contact recreation single sample maximum water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south	

LOE ID:	29714
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The total number of samples collected was 975. From the 975 samples, 108 monthly geomeans were calculated with none exceeding the water contact recreation geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

Region 9

LOE ID:	29715
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The total number of samples collected was 975. Between March 2002 and December 2007, 50 were correlated with storm events. From the 50 storm event samples, 3 exceeded the water contact recreation single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

[Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south	

LOE ID:	29716
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	959
Number of Exceedances:	48
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The total number of samples collected was 959. From the 959 samples, 48 exceeded the single sample maximum objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

Region 9

LOE ID: 29717

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples included 959 individual bacteria samples and 108 monthly geomeans were calculated. Of the 108 geomeans, only one exceeded the water contact objective for enterococcus.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;

Objective/Criterion Reference: Geomean: Enterococcus density shall not exceed 35 per 100 ml.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

LOE ID:	29718
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 959. Between March 2002 and December 2007, 51 samples were correlated with storm events. Of the 51 storm event samples, 15 exceeded the water contact recreation single sample maximum for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south**

LOE ID:	29731
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories

Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	144
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were 144 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Goff Island Beach, Treasure Island Beach, Aliso North, Aliso Middle, Aliso South, Camel Point, Table Rock, Laguna Lido, 9th Street/1000 Steps, and Three Arch Bay. The posting covers two miles of beach shoreline. The beach posting covers the time frame of January 2000 -December 2006.
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south**

Region 9

LOE ID:	30186
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Dana Point HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach south' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Dana Point HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

LOE ID:	31060
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach

HSA. Lat/Long: 33.50755/-117.75087.

Temporal Representation: Samples were collected weekly from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

LOE ID: 31058

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange within the time period from January 1999 through December 2006.
A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml. over a 30 day period

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.

Temporal Representation: Samples were collected weekly from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 44198, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach - south

LOE ID: 29709

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	23
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The total number of samples was 974. From March 2002 through December 2007, 51 samples were correlated with storm events. Of the 51 storm event samples, 23 exceeded the single sample maximum objective for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Aliso Beach South, station id S8, in the Aliso Beach HSA. Lat/Long: 33.50755/-117.75087.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth](#)
Water Body ID: CAC9011300020090525212513
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43047	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Combining the latest data with old data, 97 of the 223 samples exceed the Water Quality Objective for enterococcus of a geomean of 35 cfu/100ml in a 30-day period for the protection of REC-1. Multiple samples also do not meet the respective WQOs for fecal coliform and total coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Combining the latest data with old data, 97 out of 223 samples exceed the Water Quality Objective for enterococcus of a geomean of 35 cfu/100ml in a 30-day period for the protection of REC-1 and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	

LOE ID:	74509
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	148
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 148 samples exceeded the enterococcus objective. For these water bodies, samples were collected from surfzone upcoast and surfzone downcoast. These results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site ACM1 Aliso Creek Mouth (surzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID:	74524
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	148
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 148 samples exceeded the total coliform objective. For these water bodies, samples were collected from surfzone upcoast and surfzone downcoast. These results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10,000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from site ACM1 Aliso Creek Mouth (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to June 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID: 74532

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: None of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Aliso Creek Mouth (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID: 74518

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Aliso Creek Mouth (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID:	74519
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	148
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 148 samples exceeded the fecal coliform objective. For these water bodies, samples were collected from surfzone upcoast and surfzone downcoast. These results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from site ACM1 Aliso Creek Mouth (surzone upcoast and downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to June 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	

LOE ID: 74520

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: None of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Aliso Creek Mouth (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	

LOE ID: 31093

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 51 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 51 geomeans two exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA. representing approximately 0.29 miles of shoreline. Lat/Long:33.51051/-117.75286.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID:	31091
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	51
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 51 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 51 geomeans 51 exceeded the geomean water quality objective.

Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Geomean: Total coliform density shall not exceed 1,000 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA, representing approximately 0.29 miles of shoreline. Lat/Long:33.51051/-117.75286.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

LOE ID:	31092
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	31
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 51 geomeans 31 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Geomean: Fecal coliform density shall not exceed 200 per 100ml within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA. representing approximately 0.29 miles of shoreline.
Lat/Long:33.51051/-117.75286.

Temporal Representation:

Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

LOE ID: 29734

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 782
Number of Exceedances: 93

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of Orange from January 1999 through May 2006. The number of samples collected was 782 individual bacteria samples. From the 782 samples, 93 samples exceeded single sample maximum water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the objectives are:

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA. representing approximately 0.29 miles of shoreline. Lat/Long: 33.51051/-117.75286.

Temporal Representation:

Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID: 29735

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 89
Number of Exceedances: 84

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Eighty-four of 89 monthly geomeans exceeded the geomean water quality objective.
Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the objectives are:

Objective/Criterion Reference: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA, representing approximately 0.29 miles of shoreline.
Lat/Long:33.51051/-117.75286.

Temporal Representation: Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID: 29736

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44

Number of Exceedances:	22
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through May 2006. Total number of total coliform samples was 782. Between March 2002 and December 2006, 44 samples were correlated with storm events. From the 44 samples, 22 exceeded the single sample maximum. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA, representing approximately 0.29 miles of shoreline. Lat/Long:33.51051/-117.75286.
Temporal Representation:	Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth		
LOE ID:	29737	
Pollutant:	Fecal Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	789	
Number of Exceedances:	234	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from January 1999 through May 2006. Total number of fecal coliform samples collected was 789 with 234 exceeding the single sample maximum.	
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report	

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA, representing approximately 0.29 miles of shoreline. Lat/Long:33.51051/-117.75286.
Temporal Representation:	Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	

LOE ID:	29738
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	54
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from 1999 through 2006. Total number of fecal coliform samples was 789 and 89 monthly geomeans were calculated. Of the 89 geomeans, 54 exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA. representing approximately 0.29 miles of shoreline.
Lat/Long:33.51051/-117.75286.

Temporal Representation: Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID: 30187

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Aliso HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach, at Aliso Creek mouth' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Aliso HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID: 29739

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	28
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from 1999 through 2006. Total number of fecal coliform samples was 789. Between March 2002 and December 2006, 44 samples were correlated with rainfall events with 28 exceeding the single sample maximum. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA, representing approximately 0.29 miles of shoreline. Lat/Long:33.51051/-117.75286.
Temporal Representation:	Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2007
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID:	29740
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	778

Number of Exceedances:	491
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from 1999 through 2006. Total number of samples collected was 778 with 491 samples exceeding the single sample maximum.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA, representing approximately 0.29 miles of shoreline. Lat/Long:33.51051/-117.75286.
Temporal Representation:	Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID:	29741
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	89
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from 1999 through 2006. Total number of Enterococcus samples was 778 and 89 monthly geomeans were calculated. All of the geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are:

Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA. representing approximately 0.29 miles of shoreline. Lat/Long:33.51051/-117.75286.
Temporal Representation:	Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43047, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Region 9

LOE ID:	29742
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	43
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline monitoring data was collected by the County of Orange from 1999 through 2006. Total number of Enterococcus samples was 778. Between March 2002 and December 2006, 48 samples were correlated with rainfall events with 43 exceeding the single sample maximum objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the objectives are: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from the station C1 located near the mouth of Aliso Creek in the Aliso Beach HSA, representing approximately 0.29 miles of shoreline.

Lat/Long:33.51051/-117.75286.

Temporal Representation:

Samples were collected weekly from January 1999 through May 2006; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

DECISION ID

49660

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

Pollutant:

Chlorpyrifos

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49660, Chlorpyrifos

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

LOE ID:

74507

Pollutant:

Chlorpyrifos

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

Total Dissolved

Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the five samples exceeded the Criteria Continuous Concentration for Chlorpyrifos of 9 ng/L. However, for three samples the Reporting limit exceeded the evaluation guideline and these data were not usable.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, "The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth at locations ACM-1 and ACM-1d.
Temporal Representation:	Samples were collected in September 2006; June, September and December 2007; and January 2008.
Environmental Conditions:	Samples were collected in the dry season and during storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefor the quality of these data are unknown. For three samples the Reporting Limit of 10 ng/L is higher than the criteria of 9ng/L which makes these data not usable.
QAPP Information Reference(s):	

DECISION ID	49661	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Diazinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Eight samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully

supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49661, Diazinon
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth**

Region 9

LOE ID:	74508
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceeded the Criteria Continuous Concentration for diazinon of 820 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, "The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth at locations ACM-1 and ACM-1d.
Temporal Representation:	Samples were collected from ACM-1 on September and December in 2006; and January of 2008. Samples were collected from ACM-1d on October 2007; May, October, December 2008; and April 2009.
Environmental Conditions:	Samples were collected in the dry season and during storm events.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**DECISION ID 49662
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth**

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Eight samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 49662, Malathion
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth**

Region 9

LOE ID:	74521
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the eight samples exceeded the maximum concentration for Malathion of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, "The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected from Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth at locations ACM-1 and ACM-1d.
Temporal Representation:	Samples were collected from ACM-1 on September and December in 2006; and January of 2008. Samples were collected from ACM-1d on October 2007; May, October, December 2008; and April 2009.
Environmental Conditions:	Samples were collected in the dry season and during storm events.

QAPP Information:

Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

DECISION ID	49663	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Objective for Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Eight samples exceeded the Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49663, Nitrogen, ammonia (Total Ammonia)	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	

LOE ID:	74522
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of eight sample medians exceeded the water quality objective for total ammonia. Each samples was calculated a median using the sample and all other samples taken previously

Data Reference:	within a 180-day period. Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Ocean Plan objective for total ammonia as nitrogen is a moving 6-month median of 600 ug/L.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station ACM-1.
Temporal Representation:	Samples were collected from September 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	49667	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Objective for pH.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49667, pH	Region 9
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Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth

LOE ID: 74523

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Numeric data generated from 1 sample of pH data had no exceedences.
Data Reference: [Data for bacteria in various waterbodies, Feb. 2005-May 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the Aliso Creek at mouth - estuary station.
Temporal Representation: One sample was collected on 5/5/2007.
Environmental Conditions:
QAPP Information: NPDES quality assurance.
QAPP Information Reference(s):

DECISION ID 49665**Region 9****Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth**

Pollutant: Toxicity
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2029
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of six samples exhibited water toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of six samples exhibited water toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 49665, Toxicity
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth**

Region 9

LOE ID:	74533
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to test for toxicity. Three of the nine samples exhibited statistically and biologically significant toxicity. The toxicity tests that exhibited significant toxicity included Mysid biomass and survival and Purple Urchin development and fertilization.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample was evaluated by determining whether the sample response was lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected at station ACM1d in the ocean close to Aliso Creek Mouth.
Temporal Representation:	The samples were collected from October 2007 to February 2010.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon](#)
Water Body ID: CAC9011300020090525211046
Water Body Type: Coastal & Bay Shoreline

DECISION ID 43054 **Region 9**
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. With the latest data, five of the 390 samples exceeded the Water Quality Objective for enterococcus of a geomean of 35 cfu/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve lines of evidence are available in the administrative record to assess this pollutant. With the latest data, five of the 390 samples exceeded the Water Quality Objective for enterococcus of a geomean of 35 cfu/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

LOE ID: 74540
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 126 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Coastal Stormdrain at Blue Lagoon Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	74544
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 126 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Blue Lagoon Drive (surfzone upcoast and surfzone downcoast).

Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon	

LOE ID:	74542
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Blue Lagoon site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon	

LOE ID:	74543
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 143 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site BLULGN, Coastal Stormdrain at Blue Lagoon Drive (surzone upcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	77584
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	121
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Three of the 121 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon.
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	74536
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 126 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Blue Lagoon Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	74537
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Blue Lagoon site.
Temporal Representation: Samples were collected approximately once a week from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID: 29700

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of Orange January 1999 through December 2007. The number of samples included 934 individual bacteria samples and 108 monthly geomeans were calculated. From the 108 geomeans, none exceeded geomean water quality objective for water contact recreation.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID: 29699

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	934
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples included 934 individual bacteria samples and 108 monthly geomeans were calculated. From the 934 samples, one sample exceeded single sample maximum water quality objective for water contact recreation.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	29698
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	51
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected for total coliform analysis was 934. Between March 2002 and December 2007, 51 samples could be associated with storm events. Of these 51 samples, 14 exceeded the single sample maximum total coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional

[Temperature and Precipitation Listings by Station](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

LOE ID:	29697
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	934
Number of Exceedances:	46
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected for total coliform analysis was 934. Of the 934 samples, 46 exceeded the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon	

LOE ID:	74538
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 131 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site BLULGN, Coastal Stormdrain at Blue Lagoon Drive (surzone upcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon	

LOE ID:	29707
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	51
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 934 individual samples collected with 51 samples correlated with storm events. From the 51 storm event samples, 7 exceeded the water contact recreation single sample maximum water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	30322
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Aliso HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Aliso HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

LOE ID: 74535

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 121 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Blue Lagoon site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

LOE ID: 29706

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. There were 934 individual samples collected with 108 monthly geomeans calculated. From the 108 monthly geomeans, 2 exceeded the water contact recreation geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon	

LOE ID:	29705
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	934
Number of Exceedances:	48
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 934 bacteria samples. Of the 934 samples, 48 exceeded the water contact recreation single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	29704
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples collected was 934 bacteria samples. From March 2002 to December 2007, 51 samples were correlated with storm events. Of the 51 storm event samples, only one sample exceeded the water contact recreation single sample maximum water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long:

33.51689/-117.76118)

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

LOE ID: 29703

Pollutant: Fecal Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
 Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
 Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples included 934 individual bacteria samples and 108 monthly geomeans were calculated. From the 108 geomeans, none of the geomeans exceeded fecal coliform water quality objective for water contact recreation.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
 QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

LOE ID:	29702
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	934
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2007. The number of samples included 934 individual bacteria samples and 108 monthly geomeans were calculated. From the 934 samples, four samples exceeded single sample maximum water quality objective for water contact recreation.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	29701
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 1999 through December 2006. The total number of samples collected was 934 individual bacteria samples. Between March 2002 and December 2007, 51 samples were associated with a storm event. From the 51 samples, none exceeded single sample maximum water quality

objective for water contact recreation. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	29733
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	204
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were and 204 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange, March 2007, Annual Ocean and Bay Water Quality Report, 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Aliso Beach and South Laguna Beach in Orange County, California. Beaches included Emerald Bay, Crescent Bay, Laguna Main Beach, Hotel Laguna, Bluebird Canyon, Victoria Beach and Blue Lagoon. The posting covers 4.4 miles of beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2000 -December 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon	

LOE ID:	74534
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 143 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site BLULGN, Coastal Stormdrain at Blue Lagoon Drive (surfzone upcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID: 31090

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Orange County collected Beach monitoring data within the time period from January 1999 through December 2006.
A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml within any 30 day period (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID: 31089

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml \within any 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon

Region 9

LOE ID:	31088
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans two exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. within any 30 day period

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Blue Lagoon, station id S13, in the Aliso Beach HSA. (lat/long: 33.51689/-117.76118)

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

**Line of Evidence (LOE) for Decision ID 43054, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon**

Region 9

LOE ID: 74541

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 143
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon to determine beneficial use support and results are as follows: 2 of 142 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon was collected at 1 monitoring site [Blue Lagoon]

Temporal Representation: Data was collected over the time period January 2008 to August 2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach](#)
Water Body ID: CAC9013000020090526120147
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43951	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 77 of 166 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 77 of 166 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	74945
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	36
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty-six of the 147 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CSBMP1, Coastal Stormdrain at Capistrano Beach (surzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	74946
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	65
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Sixty-five of the 134 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from Coastal Stormdrain at Capistrano Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	30738
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected of which 121 are dry weather (AB411) samples with three exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	30997
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans three exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. over a 30 day period (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period. AB411 excludes the consideration of wet weather data.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	30996
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.

Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml; over a 30 day period (SWRCB, 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period. AB411 excludes the consideration of wet weather data.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	30995
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange within the time period from May 2004 through December 2006. A total of 20 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 20 geomeans zero exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. over a 30 day period (SWRCB 2005)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week within the time period from May 2004 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	30843
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	536
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected of which 536 are dry weather (AB411) samples with one of those samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml. Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	29683
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Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected and 32 monthly geomeans were calculated. From the 32 geomeans, 12 exceeded geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	29682
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	29
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 29 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation: Environmental Conditions: QAPP Information:	Samples were collected at least once a week from May 2004 through December 2006. Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	29681
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 6 samples correlated with a storm event. From the 6 samples, one exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower

Temporal Representation:
Environmental Conditions:

San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Samples were collected at least once a week from May 2004 through December 2006.
Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID: 29680

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 547 single samples were collected with 32 monthly geomean calculated. From the 32 geomeans, two exceeded the geomean water quality objective.

Data Reference: [The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml

Objective/Criterion Reference: [Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; \(SWRCB, 2005\)](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.

Temporal Representation: Samples were collected at least once a week from May 2004 through December 2006.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	29679
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with four exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml
Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; (SWRCB, 2005) Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	29685
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	1307
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2007, there were and 1307 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have

exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2007. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
[County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006](#)

Data Reference:

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Beach posting information was for all of Capistrano County Beach.

Temporal Representation:

The beach posting covers the time frame of January 2000 -December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:

29678

Pollutant:

Total Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

6

Number of Exceedances:

0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:

[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[The National Pollutant Discharge Elimination System \(NPDES\) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml.

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID:	29677
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 548 single samples were collected with 32 monthly geomeans calculated. None of the 32 geomeans exceeded the geomean water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	29684
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 6 samples correlated with a storm event. From the 6 samples, 6 exceeded single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program, Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach**

LOE ID:	29676
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	29675
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 6 samples correlated with a storm event. From those 6 samples, 5 exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From The Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Temporal Representation:	Samples were collected at least once a week from May 2004 through December 2006.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	29674
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	127
Number of Exceedances:	26
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected with 26 exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data. 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From The Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower San Juan HSA. This location is found near the southern border of County of Orange Beach

Temporal Representation: Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
 Environmental Conditions: Samples were collected at least once a week from May 2004 through December 2006.
 QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
 QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID: 74970

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134
 Number of Exceedances: 0

Data and Information Type: Not Specified
 Data Used to Assess Water Quality: Zero of the 134 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Capistrano Beach (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	

LOE ID: 74969

Pollutant: Total Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
 Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 147 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CSBMP1, Coastal Stormdrain at Capistrano Beach (surzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	30637
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	23
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from May 2004 through December 2006. A total of 127 single samples were collected of which 121 are dry weather (AB411) samples with 23 samples exceeding the single sample water quality objective.
Data Reference:	The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, Coastal Storm Drain Outfall Program. Bacteria Shoreline Data, 2002 through 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There is one sampling location at South Capistrano County Beach, CSBMP1, in the Lower

Temporal Representation:
Environmental Conditions:
QAPP Information:

San Juan HSA. This location is found near the southern border of County of Orange Beach Park, in Capistrano Beach/Dana Point. Lat/Long: 33.45403/-117.66666.
Samples were collected at least once a week from May 2004 through December 2006.

QAPP Information Reference(s):

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

Region 9

LOE ID: 30312

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Lower San Juan HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Lower San Juan HSA, at South Capistrano County Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Lower San Juan HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

Region 9

LOE ID: 74968

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	134
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 134 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Capistrano Beach (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43951, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach

LOE ID:	74967
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 147 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CSBMP1, Coastal Stormdrain at Capistrano Beach (surzone upcoast and surfzone downcoast).

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

The samples were collected once a week from July 2006 to June 2009.

The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet](#)
Water Body ID: CAC9042100020090602112404
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44011	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 13 of the 168 samples exceeded the Water Quality Objective for total coliform of a single sample maximum of 230/100 ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 13 of the 168 samples exceeded the Water Quality Objective for total coliform of a single sample maximum of 230/100 ml, and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet	

LOE ID:	29754
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 112. Of the 112 samples, three were correlated with a storm event. Of the three samples, only one exceeded the single sample maximum total coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet		
LOE ID:	29756	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	25	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 112 with 25 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.	

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected weekly from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:	29765
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 11 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the

Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Bacteriological monitoring samples were collected at Buena Vista Lagoon Outlet at Carlsbad State Beach, Carlsbad, CA.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:

74588

Pollutant:

Total Coliform

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Shellfish Harvesting

Number of Samples:

56

Number of Exceedances:

2

Data and Information Type:

PATHOGEN MONITORING

Data Used to Assess Water Quality:

Water Board staff assessed bw data for Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet to determine beneficial use support and results are as follows: 2 of 56 samples exceed the criterion for Coliform, Total.

Data Reference:

[Data for Region 9 Beach Watch.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet was collected at 1 monitoring site [Buena Vista Lagoon outlet]

Temporal Representation:

Data was collected over the time period 4/3/2008 -7/6/2010.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:

31347

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 98 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Zero of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:	31348
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 66 dry month (April through October) single samples were collected with 21 dry month geomeans calculated. Zero of the 21 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:	30306
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Buena Vista Creek HA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Buena Vista creek HA, at Buena Vista Lagoon Outlet' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Buena Vista Creek HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

Region 9

LOE ID:	29764
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 112 single samples were collected with three samples correlated with a storm event. One of the three single samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

Region 9

LOE ID:	30559
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 112 single samples were collected of which 109 are dry weather (AB411) samples with three sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:	29759
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from October 2004 through April 2007. A total of 72 single samples were collected with 1 sample correlated with a storm event. The sample did not exceed the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from October 2004 through April 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet	

LOE ID:	29758
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through April 2007. A total of 72 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through April 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:	29757
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 112 with three samples correlated with a storm event. Only one of the three samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected weekly from June 2004 through October 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet**

LOE ID:	30680
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	71
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through April 2007. A total of 72 single samples were collected of which 71 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through April 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:	29760
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through April 2007. A total of 72 single samples were collected with 17 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through April 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet	

LOE ID:	29761
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 112 single samples were collected with four sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet	

LOE ID:	29762
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data were collected by the County of San Diego from June 2004 through October 2007. A total of 112 single samples were collected with 25 monthly geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID:	31349
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 98 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Zero of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected weekly from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet	

LOE ID:	29755
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 112. Of the 112 samples, three exceeded the single sample maximum total coliform standard.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.
Temporal Representation:	Samples were collected weekly during the swimming season from June 2004 through October 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44011, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet

LOE ID: 29753

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 112
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 112. Of the 112 samples, 11 exceeded the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station Buena Vista Lagoon Outlet, station id EH-440, in the Carlsbad State Beach. Lat/Long: 33.08670/-117.31329.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village](#)
Water Body ID: CAC9042100020090602133102
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43662	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Including the newest data, zero of the 44 samples collected in AB411 period exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a rolling 30-day period.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the newest data, zero of the 44 samples collected in AB411 period exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a rolling 30-day period and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village	

LOE ID: 29773

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). A total of 59 single samples were collected with 17 geomeans calculated. One of the 17 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected from June 2004 through October 2007, and once in February 2004.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID:	29772
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 59 single samples were collected with one sample correlated with a storm event. The storm sample did not exceed the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Carlsbad State Beach at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected from June 2004 through October 2007, and once in February 2004.
Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 29771

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 59
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). A total of 59 single samples were collected with only one sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Carlsbad State Beach at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected during the swimming season from June 2004 through October 2007, and once in February 2004.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village**

LOE ID:	77592
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the eighteen samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village.
Temporal Representation:	The samples were collected from April 2008 through September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village**

LOE ID:	29769
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from June 2004 through October 2007 (and once in February 2004). The number of samples collected for total coliform analysis was 93 with 20 monthly geomeans

calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected during the swimming season from June 2004 through October 2007, and once in February 2004.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 29768

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 93

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). The number of samples collected for total coliform analysis was 93. None of the samples exceeded the single sample maximum total coliform standard.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected Carlsbad State Beach at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected during the swimming season from June 2004 through October

2007, and once in February 2004.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 29766

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 93
Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 93 with five samples exceeding the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 30307

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Buena Vista Creek HA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Buena Vista creek HA, at Carlsbad State Beach at Carlsbad Village' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Buena Vista Creek HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID:	29778
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. The number of samples collected for total coliform analysis was 93. Of the 93 samples, only two were correlated with a storm event. Neither sample exceeded the single sample maximum total coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected from June 2004 through October 2007, and once in February 2004.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID:	29770
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). The number of samples collected for total coliform analysis was 93 with only two samples correlated with a storm event. The two samples did not exceed the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the Carlsbad State Beach, in at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected during the swimming season from June 2004 through October 2007, and once in February 2004.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 29776

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: -N/A

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:	Bacteriological monitoring samples were collected at Carlsbad Village Drive at Carlsbad State Beach, Carlsbad, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village	

LOE ID:	29775
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). A total of 92 single samples were collected with two samples correlated with a storm event. Neither of the two storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected from June 2004 through October 2007, and once in February 2004.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 29777

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data were collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). A total of 92 single samples were collected with 26 monthly geomeans calculated. Only one of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected from June 2004 through October 2007, and once in February 2004.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 74596

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 18
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 18 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Carlsbad State Beach, Carlsbad Village site.
Temporal Representation:	Samples were collected roughly once per week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID:	74595
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village was collected at 1 monitoring site [Carlsbad Village Drive]
Temporal Representation:	Data was collected over the time period 4/18/2008-9/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID:	74594
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 18 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Carlsbad State Beach, Carlsbad Village site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village**

LOE ID:	31256
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from July 2002 through October 2007. A total of 93 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID:	31255
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 59 dry month (April through October) single samples were collected with 17 dry month geomeans calculated. None of the 17 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID:	30681
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). A total of 59 single samples were collected of which 58 are dry weather (AB411) samples with only one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected during the swimming season from June 2004 through October 2007, and once in February 2004.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village	

LOE ID:	30560
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). A total of 92 single samples were collected of which 90 are dry weather (AB411) samples with only one sample exceeding the single sample water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected from June 2004 through October 2007, and once in February 2004.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village	

LOE ID:	31254
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data were collected by the County of San Diego from July 2002 through October 2007. A total of 92 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 29774

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 92
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007 (and once in February 2004). A total of 92 single samples were collected with only one sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Carlsbad State Beach, at Carlsbad Village Drive, station id EH-475. Lat/Long: 33.15710/ -117.35312.

Temporal Representation: Samples were collected from June 2004 through October 2007, and once in February 2004.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43662, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village

LOE ID: 74589

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 18
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 18 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Carlsbad State Beach at Carlsbad Village site.
Temporal Representation:	Samples were collected roughly once per week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave](#)
Water Body ID: CAC9042100020090602133820
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43672	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Original
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

In 2006, 'Pacific Ocean Shoreline, Buena Vista Creek HA' was listed for Indicator Bacteria. For 2008, the 2006 Buena Vista Creek HA segment has been split into smaller segments that each represent an area near the sampling location of the data being assessed. 'Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave' is one of the sampling locations for Pacific Ocean Shoreline, Buena Vista Creek HA and is considered to be part of the original listing.

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of samples exceeded the Total Coliform water quality objective for Shellfish Harvesting, and Zero of the 27 samples exceeded the contact recreation objective for Enterococcus, Fecal Coliform, or Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of samples exceeded the Total Coliform water quality objective for Shellfish Harvesting, and Zero of the 27 samples exceeded the contact recreation objective for Enterococcus, Fecal Coliform, or Total Coliform and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave

LOE ID:	29785
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from April 1999 through October 2006. The total number of samples collected was 87 with no samples exceeding the water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Pine Avenue, station id EH-470. Lat/Long: 33.15540/ -117.35140.
Temporal Representation:	Samples were collected from April 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave**

LOE ID:	29781
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from April 1999 through October 2006. The number of samples collected for total coliform analysis was 87 with 27 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Pine Avenue, station id EH-470. Lat/Long: 33.15540/ -117.35140.
Temporal Representation:	Samples were collected from April 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave

LOE ID:	29789
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from April 1999 through October 2006. The number of samples collected for total coliform analysis was 87 with 27 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Pine Avenue, station id EH-470. Lat/Long: 33.15540/ -117.35140.
Temporal Representation:	Samples were collected from April 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave

LOE ID: 29788

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 27
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from April 1999 through October 2006. The number of samples collected for total coliform analysis was 87 with 27 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Carlsbad State Beach, at Pine Avenue, station id EH-470. Lat/Long: 33.15540/ -117.35140.

Temporal Representation: Samples were collected from April 1999 through October 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave

LOE ID: 30308

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Buena Vista Creek HA' was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Buena Vista creek HA, at Carlsbad State Beach at Pine Ave' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Buena Vista Creek HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave	

LOE ID:	29780
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from April 1999 through October 2006. The total number of samples collected was 87 with no samples exceeding the water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Pine Avenue, station id EH-470. Lat/Long: 33.15540/ -117.35140.

Temporal Representation:	Samples were collected from April 99 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave	

LOE ID:	29779
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Pine Avenue at Carlsbad State Beach, Carlsbad, CA.
Temporal Representation:	The beach closures advisory the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave

LOE ID:	29784
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from April 1999 through October 2006. The total number of samples collected was 87 with no samples exceeding the water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Carlsbad State Beach, at Pine Avenue, station id EH-470. Lat/Long: 33.15540/ -117.35140.
Temporal Representation:	Samples were collected from April 1999 through October 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43672, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Pine Ave**

LOE ID:	29786
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from April 1999 through October 2006. The total number of samples collected was 87 with no samples exceeding the water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected from Carlsbad State Beach, at Pine Avenue, station id EH-470.
Lat/Long: 33.15540/ -117.35140.

Temporal Representation:

Samples were collected from April 1999 through October 2006.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way](#)
Water Body ID: CAC9031100020090626150944
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44345 **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, four of 81 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, four of 81 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID: 30252
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 173

Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected with 12 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. In 2006, 'Pacific Ocean Shoreline, San Luis Rey HU' was listed for Indicator Bacteria. For 2008, the 2006 San Luis Rey HU segment has been split into smaller segments and each represents an area near the sampling location of the data being assessed. 'Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way' is one of the sampling locations for Pacific Ocean Shoreline, San Luis Rey HU, and is considered to be part of the original listing.
Objective/Criterion Reference:	For this 2008 assessment, the Regional Board has chosen to replace the 'indicator bacteria' listing with separate assessments of the specific indicator bacteria, such as total coliform, fecal coliform, and enterococcus, for removal or non-removal from the 303(d) list. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	75082
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 47 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not

Objective/Criterion Reference: exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Oceanside Pier at Pier View Way site.
Temporal Representation: Samples were collected from January 2008 to August 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID: 30246

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 173
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected with two samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID: 30647

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	163
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected of which 163 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	30242
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	173
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	30854
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	163
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected of which 163 are dry weather (AB411) samples and none of those samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	30251
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 173 single samples were collected with ten samples correlating with a storm event. Two of the ten samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	77672
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	47
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Four of the 47 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way.
Temporal Representation:	The samples were collected from January 2008 to August 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	30256
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	17
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 17 beach advisory days for this section of shoreline. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Beach advisories were posted at the Oceanside City Beach at Pierview Way in Oceanside, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way	

LOE ID:	30250
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected with 34 monthly geomeans calculated. None of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.

Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way**

LOE ID:	30249
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected and 34 geomeans calculated. None of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way**

LOE ID:	30245
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 173 single samples were collected with ten samples correlated with a storm event. None of the ten samples exceeded the single sample water quality objective. In 2006, 'Pacific Ocean Shoreline, San Luis Rey HUA' was listed for Indicator Bacteria. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way		
LOE ID:	30244	
Pollutant:	Fecal Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	173	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004	

Data Reference:	through December 2007. A total of 173 single samples were collected with no sample exceeding the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	31199
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 104 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID: 31198

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 104 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID: 31197

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 104 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way	

LOE ID:	30243
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 173 single samples were collected with ten samples correlated with a storm event. None of the ten samples exceeded the single sample water quality objective. In 2006, 'Pacific Ocean Shoreline, San Luis Rey HU' was listed for Indicator Bacteria. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
	Comparisons were also made for days with matching bacteria and storm event data. A

Objective/Criterion Reference:	storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way	

LOE ID:	30248
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected with 34 monthly geomeans calculated. None of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID: 75085

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 47
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 47 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Oceanside Pier at Pier View Way site.
Temporal Representation: Samples were collected from January 2008 to August 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID: 30746

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 163
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 173 single samples were collected of which 163 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	75084
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	55
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way to determine beneficial use support and results are as follows: 3 of 55 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way was collected at 1 monitoring site [Pier View Way]
Temporal Representation:	Data was collected over the time period 1/9/2008-8/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	75083
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 47 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Oceanside Pier at Pier View Way site.
Temporal Representation:	Samples were collected from January 2008 to August 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44345, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	30247
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 173 single samples were collected with ten samples correlating with a storm event. One of the ten samples exceeded the single sample water quality objective. In 2006, "Pacific Ocean Shoreline, San Luis Rey HU" was listed for Indicator Bacteria. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB,

2005).

Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Oceanside Pier (at Pier View Way), San Diego, California. Department of Environmental Health identification number is OC-080.

Temporal Representation:

Samples were collected from February 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006](#)

DECISION ID	49998	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 5/12/07, 3/8/08, 3/14/09 and 3/13/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,147.25. Using the metric, Coastkeeper classified this water body as medium for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.3. This process is scientifically defensible and reproducible.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49998, Trash

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way

LOE ID:	75086
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 5/12/07, 3/8/08, 3/14/09 and 3/13/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,147.25. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Oceanside pier at pier view way.
Temporal Representation:	Four cleanups that occurred on 5/12/07, 3/8/08, 3/14/09 and 3/13/10.
Environmental Conditions:	
QAPP Information:	QAPP provided from the San Diego Coastkeeper.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth](#)
Water Body ID: CAC9031100020090626115722
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44090	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under Section 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section [NUMBER] of the Policy.
2. The data used satisfies the data quantity requirements of section NUMBER of the Policy.
3. With the latest data, 17 of 92 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1 beneficial use, and 201 of 608 samples exceed the SSM WQO for total coliform for the protection of SHELL beneficial use, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches and creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID: 75211

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 47 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Harbor Beach site.
Temporal Representation:	Samples were collected from January 2008 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	30176
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)

For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Luis Rey HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at San Luis Rey River mouth' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Luis Rey HU and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:

QAPP Information: Unspecified

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 75213

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 47
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 47 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Harbor Beach site.
Temporal Representation: Samples were collected from January 2008 to February 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 75214

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 203
Number of Exceedances: 18

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Eighteen of the 203 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Luis Rey river outlet site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	77671
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	250
Number of Exceedances:	85
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eighty-five of the 250 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth at stations Harbor Beach and San Luis Rey River outlet, south jetty.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	75245
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	266
Number of Exceedances:	69
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth to determine beneficial use support and results are as follows: 69 of 266 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth was collected at 2 monitoring sites [Harbor Beach, San Luis Rey River outlet]
Temporal Representation:	Data was collected over the time period 1/9/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	75246
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 47 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Harbor Beach site.

Temporal Representation: Samples were collected from January 2008 to February 2009.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 75247

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 203
Number of Exceedances: 13

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Thirteen of the 203 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the San Luis Rey river outlet site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 30853

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 327
Number of Exceedances: 7

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected of which 327 are dry weather (AB411) samples with seven of those samples exceeding the single sample water quality objective.
Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of Orange, Quality Assurance/Quality Control Manual, February 2004
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	30203
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 282 single samples were collected with 13 samples correlated with a storm event. Four of the 13 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 30747

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 269
Number of Exceedances: 22

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 282 single samples were collected of which 269 are dry weather (AB411) samples with 22 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 31194

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 200 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Six of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.

Temporal Representation: Samples were collected from April 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 31195

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 157 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. One of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID:	31196
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 200 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. One of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	30198
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	342
Number of Exceedances:	132
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 132 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, Oceanside, California. Department of Environmental Health identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID:	30199
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 15 samples correlated with a storm event. Nine of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 30208

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	17
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 45 monthly geomeans calculated. Seventeen of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	30253
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	457
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 457 beach advisory days for this section of shoreline. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Beach advisories were posted at the San Luis Rey rivermouth in Oceanside, CA.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID: 30204

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 342
Number of Exceedances: 49

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 49 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 30205

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 15
Number of Exceedances: 7

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 15 samples correlated with a storm event. Seven of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: [Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID: 30206

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 45
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 45 monthly geomeans calculated. Three of the 45 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID: 30207

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 282 single samples were collected and 45 geomeans calculated. Three of the 45 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	30648
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	327
Number of Exceedances:	42
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected of which 327 are dry weather (AB411) samples with 42 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	30200
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	342
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 10 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	

Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	30201
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 342 single samples were collected with 15 samples correlated with a storm event. Three of the 15 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

March.
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 30202

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 282
Number of Exceedances: 26

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 282 single samples were collected with 26 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Luis Rey River Outlet South, San Diego, California. Station identification number is OC-100.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44090, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Region 9

LOE ID: 75212

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	203
Number of Exceedances:	51
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-one of the 203 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Luis Rey river outlet site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID	49981	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Arsenic.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exceeded the Evaluation Guideline for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	75196
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49982, Cadmium**Region 9****Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth**

LOE ID: 75197

Pollutant: Cadmium
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental

Objective/Criterion Reference:	physiological responses in human, plant, animal, or aquatic life. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49983	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49983, Chlordane

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	75201
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49984	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49984, Chlorpyrifos	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID:	75202
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49985	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Dieldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Dieldrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial
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use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49985, Dieldrin

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	75203
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

QAPP Information Reference(s):

DECISION ID	49986	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endosulfan.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endosulfan and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49986, Endosulfan	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID: 75209

Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1

	minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49987	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		
Pollutant:	Endrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49987, Endrin

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	75210
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 1/16/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49988	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant: Heptachlor epoxide

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Heptachlor epoxide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Heptachlor epoxide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49988, Heptachlor epoxide	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID: 75222

Pollutant: Heptachlor epoxide

LOE Subgroup: Pollutant-Tissue

Matrix: Tissue

Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49989	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		
Pollutant:	Hexachlorobenzene/ HCB	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hexachlorobenzene/ HCB.</p>	

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Hexachlorobenzene/ HCB and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49989, Hexachlorobenzene/ HCB
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth**

Region 9

LOE ID:	75223
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs.

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 1/16/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49990	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49990, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID: 75224

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49991	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mercury.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49991, Mercury**Region 9****Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth**

LOE ID:	75233
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 1/16/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49992	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant: Mirex

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Evaluation Guideline for Mirex.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Evaluation Guideline Mirex for and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49992, Mirex	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	

LOE ID: 75234

Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The detected not quantifiable result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49993	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49993, PAHs (Polycyclic Aromatic Hydrocarbons)
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth****Region 9**

LOE ID: 75235

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.

Data Reference: [State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 49994 Region 9	
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth	
Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PCBs (Polychlorinated biphenyls).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for PCBs (Polychlorinated biphenyls) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49994, PCBs (Polychlorinated biphenyls)

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	75243
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID

49995

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

Pollutant: Selenium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49995, Selenium

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID: 75244

Pollutant: Selenium
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Shellfish Harvesting

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental

Objective/Criterion Reference:	physiological responses in human, plant, animal, or aquatic life. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49996	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49996, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth

LOE ID:	75081
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Oceanside Municipal Beach Jetty (OSBJ).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/16/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way](#)
Water Body ID: CAC9031100020090626150031
Water Body Type: Coastal & Bay Shoreline

DECISION ID 44137 **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 5 of 81 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 5 of 81 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 77669
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 47

Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Three of the 47 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way.
Temporal Representation:	The samples were collected from January 2008 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way	

LOE ID:	30855
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	160
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 171 single samples were collected of which 160 are dry weather (AB411) samples and none of those samples exceeded the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way	

LOE ID:	30217
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 170 single samples were collected and 34 geomeans calculated. None of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way	

LOE ID:	30216
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 171 single samples were collected with 34 monthly geomeans calculated. None of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID:	30649
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	160
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 171 single samples were collected of which 160 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 31193

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 102 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.

Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 31192

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 101 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID:	30748
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	170
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 170 single samples were collected of which 159 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 30220

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 171

Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 171 single samples were collected with six samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID:	30219
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 171 single samples were collected with 11 samples correlated with a storm event. Two of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way**

LOE ID:	30218
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 171 single samples were collected with 34 monthly geomeans calculated. One of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID:	30211
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 171 single samples were collected with 11 samples correlated with a storm event. None of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way	

LOE ID:	30214
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 171 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 30212

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 11

Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 170 single samples were collected with 11 samples correlating with a storm event. None of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.

Temporal Representation: Samples were collected from February 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through

QAPP Information: March.
Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 30210

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 170
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 170 single samples were collected with no sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 30209

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 171
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 171 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way	

LOE ID:	30215
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 171 single samples were collected with 11 samples correlating with a storm event. One of the 11 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way	

LOE ID:	30254
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were five beach advisory days for this section of shoreline. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-

Objective/Criterion Reference:	contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met. California Code of Regulations, Title 17, Section 7960
Evaluation Guideline: Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Beach advisories were posted at the Oceanside City Beach at Surfrider Way in Oceanside, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID:	31191
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 102 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Surfrider Way), San Diego, California. Department of Environmental Health identification number is OC-090.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID:	75188
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 47 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Surfrider Way site.
Temporal Representation:	Samples were collected from January 2008 to February 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way**

LOE ID:	75187
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way was collected at 1 monitoring site [Surfrider Way]

Temporal Representation: Data was collected over the time period 1/9/2008-2/2/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 75185

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 47

Number of Exceedances: 4

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Four of the 47 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Surfrider Way site.

Temporal Representation: Samples were collected from January 2008 to February 2009.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44137, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way

LOE ID: 75186

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 47

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 47 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Surfrider Way site.

Temporal Representation:

Samples were collected from January 2008 to February 2009.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way](#)
Water Body ID: CAC9041000020090626151601
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43450	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 8 of 164 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 8 of 164 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way	

LOE ID:	75193
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	130

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 130 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tyson Way site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	75194
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	133
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way to determine beneficial use support and results are as follows: 8 of 133 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way was collected at 1 monitoring site [Tyson Street]
Temporal Representation:	Data was collected over the time period 1/9/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	75195
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	130
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 130 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tyson Street site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	75189
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	130
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 130 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tyson Street site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

LOE ID: 31189

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation: Samples were collected from June 2004 through October 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

LOE ID: 31190

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	30749
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	167
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected of which 167 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California.

Temporal Representation:	Department of Environmental Health identification number is OC-050.
Environmental Conditions:	Samples were collected from January 2004 through December 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	31188
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 103 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California.
Temporal Representation:	Department of Environmental Health identification number is OC-050.
Environmental Conditions:	Samples were collected from June 2004 through October 2007.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	30257
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	2555
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were four beach advisory days for this section of shoreline. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards. Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Beach advisories were posted at the Oceanside City Beach at Tyson Street in Oceanside, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way**

Region 9

LOE ID:	30259
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 184 single samples were collected with 17 samples

correlating with a storm event. Two of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.

Temporal Representation: Samples were collected from February 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID: 30261

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 184
Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with five samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way**

Region 9

LOE ID:	30262
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 184 single samples were collected with 17 samples correlating with a storm event. Four of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.

Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way	

LOE ID:	30265
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 34 monthly geomeans calculated. None of the 34geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way	

LOE ID:	30266
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Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 34 monthly geomeans calculated. None of the 34 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way**

Region 9

LOE ID:	30267
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	17
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 184 single samples were collected with 17 samples correlating with a storm event. Six of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	30650
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	167
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected of which 167 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health. Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID: 30263

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 184

Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with five samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID: 30264

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from February 2004 through December 2007. A total of 184 single samples were collected with 17 samples correlating with a storm event. Five of the 17 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from February 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	30258
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	184
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

Region 9

LOE ID:	30268
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	184
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with nine samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

**Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way**

Region 9

LOE ID: 30856

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 167
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected of which 167 are dry weather (AB411) samples and none of those exceeded the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way

LOE ID:	30269
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 184 single samples were collected with 44 monthly geomeans calculated. None of the geomeans exceeded the water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Oceanside Pier (at Tyson Street), San Diego, California. Department of Environmental Health identification number is OC-050.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43450, Indicator Bacteria
Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way**Region 9**

LOE ID:	77670
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	130
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eight of the 130 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Childrens Pool](#)
Water Body ID: CAC9063000020090626111813
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43824	Region 9
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Eighty-three of 106 samples exceed the Shellfish Harvesting water quality objective for Total Coliform. Two out of 106 samples exceeded the contact recreation single sample maximum evaluation guideline for total Coliform. Eleven out of 35 monthly geomeans exceeded the contact recreation evaluation guideline for Total Coliform. Fifty-Five out of 106 samples exceeded the contact recreation single sample maximum objective for Fecal Coliform. Four out of 34 monthly geomeans exceeded the contact recreation objective for fecal coliform. Four out of 106 samples exceeded the contact recreation single sample maximum and five out of 34 monthly geomeans exceeded the objective for enterococcus.

This water body segment is identified as an AB411 beach and data collected during the time frame of April 1st to October 31st (dry weather) is assessed using a four percent exceedance percentage (section 4.3 of Listing Policy). There are three additional lines of evidence for dry weather single sample. Two of 100 samples exceeded the recreational use single sample criteria. Fifty-Two out of 100 samples exceeded the contact recreation objective for fecal coliform and six out of 26 dry month geomeans exceeded the contact recreation objective for enterococcus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighty-three of 106 samples exceed the Shellfish Harvesting water quality objective for Total Coliform. Two out of 106 samples exceeded the contact recreation single sample maximum evaluation guideline for total Coliform. Eleven out of 35 monthly geomeans exceeded the contact recreation evaluation guideline for Total Coliform. Fifty-Five out of 106 samples exceeded the contact recreation single sample maximum objective for Fecal Coliform. Four out of 34 monthly geomeans exceeded the contact recreation objective for fecal coliform. Four out of 106 samples exceeded the contact recreation single sample maximum and five out of 34 monthly geomeans exceeded the objective for enterococcus and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. There are three additional lines of evidence for dry weather single sample. Two of 100 samples exceeded the recreational use single sample criteria. Fifty-Two out of 100 samples exceeded the contact recreation objective for fecal coliform and six out of 26 dry month geomeans exceeded the contact recreation objective for enterococcus, and this does not exceed the allowable limit listed in Table 4.2 (at a four percent exceedance percentage – AB411) of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

**Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool**

Region 9

LOE ID:	30337
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Scripps HA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Scripps HA, at Childrens Pool' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Scripps HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool**

Region 9

LOE ID:	30860
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 106 single samples were collected of which 100 are dry weather (AB411) samples with two of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30708
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 106 single samples were collected with six samples correlated with a storm event. None of the six samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Childrens Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

LOE ID:	30709
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 106 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID: 30710

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 35
Number of Exceedances: 11

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. Eleven of 35 monthly geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.

Temporal Representation: Samples were collected from April 1999 through October 2003.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID: 30711

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 150 six samples were correlated with a storm event. One of the six samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Childrens Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30706
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003 . Four of the 34 monthly geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30701
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	106
Number of Exceedances:	83
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 106 single samples were collected with 83 exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Childrens Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30702
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 106 single samples were collected with six samples correlated with a storm event. Five of the six storm samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30753
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	52
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003 and there were 106 total samples of which 100 are dry weather (AB411) samples. Fifty-two of the dry weatehr samples exceeded the single sample water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30195
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	2555
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there was a year round beach advisory for this section of shoreline due to the presence of marine mammals.
	When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards

Objective/Criterion Reference:	as set forth in 7957 and 7958 above are met. California Code of Regulations, Title 17, Section 7960
Evaluation Guideline: Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California.
Temporal Representation:	The beach advisories covers the time frame of January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

LOE ID:	31341
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 71 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Six of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

LOE ID:	30703
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. A total of 106 single samples were collected with four samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Childrens's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through December 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30704
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. Five of 34 monthly geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30705
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	55
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. Fifty-five of 106 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Children's Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43824, Indicator Bacteria
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool

Region 9

LOE ID:	30707
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2003. Three of the six storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Childrens Pool, La Jolla, California. Station identification number is EH-310.
Temporal Representation:	Samples were collected from April 1999 through October 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay at Dana Landing](#)
Water Body ID: CAB9075200020090712235307
Water Body Type: Bay & Harbor

DECISION ID 44114

Region 9

Mission Bay at Dana Landing

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of one sample exceeded the copper water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44114, Copper

Region 9

Mission Bay at Dana Landing

LOE ID: 30278
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Estuarine Habitat

Aquatic Life Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Water column samples were collected for the Regional Harbor Monitoring Program in Mission Bay. Three samples were collected at station M2. The mean of the three samples does not exceed the acute or chronic water quality objective.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station (M2) was sampled in Dana Landing Basin in Mission Bay at upper, middle, and lower levels within the water column.
Temporal Representation:	Samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Samples were collected in accordance with SCCWRP's Quality Assurance Project Plan for Marina Copper Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	43985	Region 9
Mission Bay at Dana Landing		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of one sample exceeded the toxicity water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Line of Evidence (LOE) for Decision ID 43985, Toxicity

Region 9

Mission Bay at Dana Landing

LOE ID:	30283
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	A toxicity test was conducted using the upper water column sample on the mussel <i>Mytilus galloprovincialis</i> at one location for the Extent and Magnitude of Copper Contamination Study. Toxicity was not observed.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.</p> <p>No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The threshold for toxicity was less than 80% development relative to the control test species (Schiff et al, 2006)
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
Spatial Representation:	One station was sampled in Dana Landing Basin (M2) in Mission Bay. Water samples were collected at upper, middle and lower levels within the water column at each station however toxicity was only conducted on the upper samples.
Temporal Representation:	Samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Quality Assurance Project Plan for Marina Copper Monitoring Study.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay at Quivira Basin](#)
Water Body ID: CAB9075200020090712233945
Water Body Type: Bay & Harbor

DECISION ID	43506	Region 9
Mission Bay at Quivira Basin		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy.

One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the water quality objective for toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of one sample exceeded the toxicity water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 43506, Toxicity	Region 9
Mission Bay at Quivira Basin	

LOE ID:	30282
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	A toxicity test was conducted using the upper water column sample on the mussel <i>Mytilus galloprovincialis</i> at three locations for the Extent and Magnitude of Copper Contamination Study. Toxicity was not observed.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The threshold for toxicity was less than 80% development relative to the control test species (Schiff et al, 2006).
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
Spatial Representation:	One station was sampled in Quivera Basin (M1) in Mission Bay. Water samples were collected at upper, middle and lower levels within the water column at each station however toxicity was only conducted on the upper samples.
Temporal Representation:	Samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Quality Assurance Project Plan for Marina Copper Monitoring Study.
QAPP Information Reference(s):	

DECISION ID	44024	Region 9
Mission Bay at Quivira Basin		

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown Unknown Nonpoint Source Unknown Point Source
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Four of the samples exceed the water quality objective for copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>
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sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All four samples exceed the copper water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44024, Copper
Mission Bay at Quivira Basin**

Region 9

LOE ID:	30279
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Three water samples were collected in Quivira Basin of Mission Bay by the Regional Harbor Monitoring Program Pilot Project. Two of the three samples exceeded the acute criteria and all three exceeding the chronic criteria.
Data Reference:	Regional Harbor Monitoring Program Pilot Project 2005-06 Regional Harbor Monitoring Program Pilot Project 2006-07
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131, U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station (M1M) was sampled in 2005 and two stations (M206M and M306M) were sampled in 2006 from Quivira Basin, Mission Bay.
Temporal Representation:	Samples were collected on August 15, 2005 and August 22, 2006.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project.
QAPP Information Reference(s):	Quality Assurance Project Plan for San Diego Regional Harbor Monitoring Program Pilot Project.

**Line of Evidence (LOE) for Decision ID 44024, Copper
Mission Bay at Quivira Basin**

Region 9

LOE ID:	30280
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The mean of the three water column samples exceed the chronic water quality objective but not the acute water quality objective. The upper sample exceeds the CTR values for both acute and chronic objective. The mid sample exceeds only the chronic CTR value. The deep sample does not exceed either water quality objectives.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station (M1) was sampled in Quivera Basin of Mission Bay. Each station was sampled at upper, middle and lower levels within the water column to total three samples.
Temporal Representation:	The sampling occurred on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Marina Copper Monitoring Study Quality Assurance Plan, June 2005.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay \(area at Santa Barbara Cove\)](#)
Water Body ID: CAB9075100020090713000515
Water Body Type: Bay & Harbor

DECISION ID	44053	Region 9
Mission Bay (area at Santa Barbara Cove)		

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 one line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The lone sample did not exceed the copper water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44053, Copper	Region 9
Mission Bay (area at Santa Barbara Cove)	

LOE ID: 30281

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Estuarine Habitat

Aquatic Life Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One station in Santa Barbara Cove in Mission Bay was sampled for dissolved copper. Each station was sampled at upper, middle, and lower levels within the water column to total three samples. The mean of the three water samples did not exceed the acute or chronic objective. None of the individual samples exceeded the water quality objectives.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the CTR, the dissolved copper chronic criterion is 3.1 ppb and the acute criterion is 4.8 ppb.
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station (M3) was sampled in Santa Barbara Cove Basin, Mission Bay.
Temporal Representation:	The sample was collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Quality Assurance Project Plan for the Marina Copper Monitoring Study.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

DECISION ID	43461	Region 9
Mission Bay (area at Santa Barbara Cove)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of one sample exceeded the toxicity water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 43461, Toxicity
Mission Bay (area at Santa Barbara Cove)**

Region 9

LOE ID:	30284
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	A toxicity test was conducted using the upper water column sample on the mussel <i>Mytilus galloprovincialis</i> at one location for the Extent and Magnitude of Copper Contamination Study. Toxicity was not observed.
Data Reference:	Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>From the Basin Plan on toxicity, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.</p> <p>No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (RWQCB, 2007).</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The threshold for toxicity was less than 80% development relative to the control test species (Schiff et al, 2006)
Guideline Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA Extent and Magnitude of Copper Contamination in Marinas of the San Diego Region, California. Technical Report 483
Spatial Representation:	One station was sampled in Santa Barbara Cove (M3) in Mission Bay. Water samples were collected at upper, middle and lower levels within the water column at each station however toxicity was only conducted on the upper samples.
Temporal Representation:	Samples were collected on August 15, 2005.
Environmental Conditions:	
QAPP Information:	Quality assurance conducted according to the Quality Assurance Project Plan for Marina Copper Monitoring Study.
QAPP Information Reference(s):	Quality Assurance Project Plan, Marina Copper Monitoring Study. SWRCB Agreement No. 04-236-190-0. A

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street](#)
Water Body ID: CAC9011400020090725220259
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44408	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 2 of 186 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 2 of 186 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	74628
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at West Street (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

LOE ID:	30300
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Dana Point HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Dana Point HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

LOE ID: 74630

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at West Street (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

LOE ID: 74631

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 149 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Trafalgar Coastal Stormdrain at West Street (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

LOE ID:	74632
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected from Coastal Stormdrain at West Street (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	74627
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at West Street (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30598
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. From the five storm event samples, none exceeded the water quality objective for fecal coliform. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St. Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30599
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	198
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. From the 198 samples, none exceeded the water quality objective for water contact recreation.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30600
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. None of the five storm samples exceeded the water contact recreation single sample maximum water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St. in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm

water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

Region 9

LOE ID: 30591

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 198
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Two of 198 samples exceeded the single sample maximum for shellfish harvesting.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station West St, in the Dana Point HSA.
Temporal Representation: Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

Region 9

LOE ID: 30596

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 198

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. From the 198 samples, none exceeded the water quality objective for fecal coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St, Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30597
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. None of the 48 monthly geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from the station West St. in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30592
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Of the five storm event samples, none exceeded the single sample maximum objective for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St, in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30605
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1460
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2004 to December 2007, there were two beach postings days for this section of shoreline. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 - December 2007. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.
Objective/Criterion Reference:	(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met. California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at West St. Aliso Beach.
Temporal Representation:	The beach posting covers the time frame of January 2004 -December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

Region 9

LOE ID:	30687
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	193
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004

Data Reference:	through December 2007. There is 198 samples, of which 193 are dry weather (AB411) samples and none exceed the water quality objective for fecal coliform. Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St, Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30801
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	193
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. There are a total of 198 samples of which 193 are dry weather (AB411) samples and none exceeded the water quality objective for water contact recreation.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

Region 9

LOE ID: 30601

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 48
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline monitoring data was collected by the County of Orange from January 2004 through December 2007. None of the geomeans exceeded the geomean water quality objective for total coliform.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml.
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the station West St.in the Dana Point HSA.
Temporal Representation: Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

Region 9

LOE ID: 30593

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 198
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Four of 198 samples exceeded the single sample maximum objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from the station West St. Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street

LOE ID:	30594
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Of the five storm event samples, two exceeded the single sample maximum for enterococcus. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	

Spatial Representation:	Samples were collected from the station West St. in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. Bacteria monitoring data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	30595
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Two of 48 monthly geomeans exceeded the water contact objective for enterococcus.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected from the station West St. Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44408, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street	

LOE ID:	74629
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at West Street (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street](#)
Water Body ID: CAC9011200020090725164440
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44563	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, six of the 186 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, six of the 186 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street	

LOE ID:	74973
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Cleo St. Stormdrain (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street	

LOE ID:	30581
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. There were 196 individual samples collected with 5 samples correlated with storm events. Of the five samples, one exceeded single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Temporal Representation:

Environmental Conditions:

Samples were collected from Cleo St, in the Laguna HSA.

Samples were collected weekly from January 2004 through December 2007.

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID: 74952

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 4

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Four of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Cleo St. Stormdrain (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID: 74951

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CLEO, Cleo St. Stormdrain at Cleo Street (surzone upcoast and surzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID:	30580
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	196
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2007 through December 2007. There were 196 individual samples collected with 8 exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Cleo St, in the Laguna HSA.
Temporal Representation: Samples were collected weekly from January 2004 through December 2007
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID: 30582

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 196
Number of Exceedances: 7

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. A total of 196 single samples were collected with seven exceeding the single sample water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Cleo St. in the Laguna HSA.
Temporal Representation: Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID: 30585

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	196
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. There were 196 individual samples with none exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Cleo St, in the Laguna HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID:	30587
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Five were samples correlated with storm event with no samples exceeding the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected from Bluebird Canyon, station id S15, in the Laguna HSA. Lat/Long: 33.52963/-117.77359.

Temporal Representation:

Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID: 30303

Pollutant: Indicator Bacteria

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

For the 2008 assessment, the 2006 listed coastline 'Pacific Ocean Shoreline, Laguna Beach HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Laguna Beach HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Unspecified

Temporal Representation: Unspecified

Environmental Conditions: Unspecified

QAPP Information: Unspecified

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID:	30586
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Forty-eight monthly geomeans calculated with none exceeding the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Cleo St. in the Laguna HSA.
Temporal Representation:	Samples were collected weekly from January 2007 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street**

LOE ID:	30590
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Five samples were correlated with storm events with none exceeding the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional

[Temperature and Precipitation Listings by Station](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Cleo St. in the Laguna HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID:	30589
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. A total of 48 monthly goemeans were calculated. None exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Cleo St. in the Laguna HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

Region 9

LOE ID: 30588

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 196
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. A total of 196 single samples were collected with one sample exceeding the single sample water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Cleo St in Laguna Beach HSA.
Temporal Representation: Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

Region 9

LOE ID: 74974

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 149
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 149 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CLEO, Cleo St. Stormdrain at Cleo Street (surzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID:	30584
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Of the 48 geomeans, two exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Cleo St. in the Laguna HSA. Lat/Long: 33.52963/-117.77359.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

LOE ID:	30583
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. Five samples were correlated with storm events. One of the five samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Cleo St. in the Laguna HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

Region 9

LOE ID:	74975
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Cleo St. Stormdrain (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street	

LOE ID:	30808
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	191
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. There were 196 individual samples of which 191 are dry weather (AB411) samples with none exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Cleo St, in the Laguna HSA.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance

QAPP Information Reference(s): with the County of Orange Quality Assessment/Quality Control document.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

Region 9

LOE ID: 30694

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 191
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 2004 through December 2007. A total of 196 single samples were collected of which 191 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Cleo St in Laguna Beach HSA.
Temporal Representation: Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44563, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street

Region 9

LOE ID: 74953

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 149
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site CLEO, Cleo St. Stormdrain at Cleo Street (surzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to June 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach](#)
Water Body ID: CAC9011100020091022115657
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44323	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. With the latest data, zero of 142 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, zero of 142 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach	

LOE ID: 30427
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	106
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 436 single samples were collected and 106 monthly geomeans calculated. None of the 106 geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID:	75163
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 36 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Crescent Bay Beach site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	

QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

Region 9

LOE ID: 30441

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 448
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 448 single samples were collected and none exceeded the single sample water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

Region 9

LOE ID: 30444

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 49
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 448 single samples were collected. Between March 2002 and December 2007, 49 samples were correlated with storm events. None of the 49 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach	

LOE ID:	30445
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 448 single samples were collected and 108 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID:	31104
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans five exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The 30-day Geometric Mean for total coliform density shall not exceed 1000 per 100 ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

Region 9

LOE ID: 31105

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 56
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Orange County collected Beach monitoring data within the time period from January 1999 through December 2006.
A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The 30-day Geometric Mean for fecal coliform density shall not exceed 200 per 100 ml
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147

Temporal Representation: Samples were collected at least once a week within the time period from January 1999 through December 2006.
The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

Region 9

LOE ID: 31106

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The 30-day Geometric mean for enterococcus density shall not exceed 35 per 100 ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

Region 9

LOE ID:	30422
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	49
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 448 single samples were collected. Between March 2002 and December 2007, 49 samples were correlated with a storm event. Of those 49 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID:	30420
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Joaquin Hills HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park North' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Joaquin Hills HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	

Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

Region 9

LOE ID: 30436

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 49
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 441 single samples were collected. Between March 2002 and December 2007, 49 samples were correlated with a storm event. Of the 49 samples, none exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report](#)
[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147

Temporal Representation: Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange, Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID:	30437
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	441
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 441 single samples were collected with only one sample exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach**

LOE ID:	30423
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	448
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 448 single samples were collected with eight samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report

[Report](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID:	30430
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. Between March 2002 and December 2007, 49 samples were correlated with a storm event. Of the 49 samples, two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006. Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006. Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach	

LOE ID:	30431
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	436
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 436 single samples were collected with five exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID:	77668
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 36 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach.
Temporal Representation:	The samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach**

LOE ID:	75164
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for

human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach was collected at 1 monitoring site [CRESCENT BAY]

Temporal Representation:

Data was collected over the time period 1/3/2008-10/27/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID: 75165

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 36
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 36 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Crescent Bay Beach site.

Temporal Representation:

Samples were collected from January 2008 to October 2009.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID: 75162

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 36

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 36 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Crescent Bay Beach site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44323, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach

LOE ID:	30434
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 441 single samples were collected with 107 geomeans calculated. Of the 107 geomeans, none exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Crescent Bay Beach, station id OLB 05, in the San Joaquin HSA. Lat/Long: 33.54658/-117.80147
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach](#)
Water Body ID: CAC9011100020091022114130
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44529	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. With the latest data, one of 244 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, one of 244 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	30439
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1460

Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2004 to December 2007, there were and 4 beach postings days for this section of shoreline. Bacteriological samples are collected on a weekly basis at approximately 150 ocean and bay location in Orange County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
Data Reference:	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2004 -December 2007. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards. County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples was collected at Emerald Bay beach shoreline.
Temporal Representation:	The beach posting covers the time frame of January 2004 -December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	31107
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion: Objective/Criterion Reference:	The 30-day Geometric Mean for total coliform density shall not exceed 1000 per 100 ml Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	30424
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	452
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 452 single samples were collected with six samples exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	30425
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	49
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 452 single samples were collected. Between March 2002 and December 2007, 49 samples were associated with a storm event. From the 49 samples, three samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	30426
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 438 single samples were collected. Between March 2002 and December 2007, 49 samples were correlated with a storm event. Of the 49 samples, only two exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document. County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	30421
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Joaquin Hills HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Joaquin Hills HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	31108
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans zero exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The 30-day Geometric Mean for fecal coliform density shall not exceed 200 per 100 ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	31109
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Orange County collected Beach monitoring data within the time period from January 1999 through December 2006. A total of 56 monthly geomeans were calculated for data collected during the time frame of April 1st to October 31st (AB411 data) within the aforementioned time period. Of the 56 geomeans one exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The 30-day Geometric mean for enterococcus density shall not exceed 35 per 100 ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected at least once a week within the time period from January 1999 through December 2006. The data assessed is AB411 data which is data collected during the time frame of April 1st to October 31st (summer months) within the aforementioned time period.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	30432
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	445
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 445 single samples were collected with two exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	30433
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 445 single samples were collected with 107 monthly geomeans calculated. None of the 107 geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

LOE ID:	30440
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 452 single samples were collected and 108 monthly geomeans calculated. None of the 108 geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	30442
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	452
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 452 single samples were collected with none exceeding the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	30443
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 452 single samples were collected. Between March 2002 and

	December 2007, 49 samples were correlated with a storm event. None of the 49 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach		
LOE ID:	30428	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	438	
Number of Exceedances:	6	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 438 single samples were collected with six samples exceeding the single sample water quality objective.	
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;	

Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	30429
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 438 single samples were collected and 106 monthly geomeans calculated. Of the 106 geomeans, only one geomean exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006. Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions: QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	30435
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of Orange from January 1999 through December 2007. A total of 445 single samples were collected. Between March 2002 and December 2007 49 samples were correlated with a storm event. None of the 49 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	Ocean Bacteriological Data Evaluation for City of Laguna Beach, 1999 through 2006, Final Report National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Objective/Criterion Reference:	Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Emerald Bay Beach, station id OLB 10, in the San Joaquin HSA. Lat/Long: 33.55099/-117.80801.
Temporal Representation:	Samples were collected weekly from January 1999 through December 2007; however, rainfall data is only available from March 2002 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	75166
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Emrld coastal stormdrain(surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID:	75167
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain at Valley Inn Drive (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID: 75168

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 149
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: One of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected from Emrld coastal stormdrain (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach

Region 9

LOE ID: 75172

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Valley Inn Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	75173
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Emrld coastal stormdrain (surfzone upcoast and surfzone

Temporal Representation:	downcoast).
Environmental Conditions:	The samples were collected once a week from July 2006 to 2009.
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44529, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Emerald Bay Beach	

LOE ID:	75174
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain at Valley Inn Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue](#)
Water Body ID: CAC9071100020091027111454
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44221	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 29 of 146 geomean samples exceed the water quality objective for total coliform for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 29 of 146 geomean samples exceed the water quality objective for total coliform for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	

LOE ID: 75000

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 146 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Stub Jetty site, south of the San Diego River outlet, near Cape May Ave.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID:	30395
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	249
Number of Exceedances:	27
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. The number of samples collected for total coliform analysis was 249 with 27 samples exceeding the single sample maximum total coliform standard for shellfish harvesting.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	

LOE ID:	75002
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	154
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue to determine beneficial use support and results are as follows: 8 of 154 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue was collected at 1 monitoring site [Stub Jetty, south side]
Temporal Representation:	Data was collected over the time period 1/5/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	

LOE ID:	75024
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 146 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Stub Jetty site, south of the San Diego River outlet near Cape May Avenue.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID:	77658
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	146
Number of Exceedances:	29
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-nine of the 146 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue**

LOE ID:	30414
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	249
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. The number of samples collected for total coliform analysis was 249. Only one of the samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue**

LOE ID:	30415
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. The number of samples collected for total coliform analysis was 249 with 22 samples correlated with a storm event. Only one of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue		
LOE ID:	30398	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	249	
Number of Exceedances:	13	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. A total of 249 single samples were collected with 13 samples exceeding the single sample water quality objective.	
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007	

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID:	30404
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	246
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. A total of 246 single samples were collected with four of the samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 30408

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 22
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. A total of 233 single samples were collected with 22 samples correlated with a storm event. Only one of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110.
Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from August 2003 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 30409

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. A total of 233 single samples were collected with 48 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID:	30410
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from August 2003 through December 2007. The number of samples collected for total coliform analysis was 249 with 48monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110.
Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from August 2003 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 30402

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 22
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. A total of 249 single samples were collected with 22 samples correlated with a storm event. Three of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Diego HU, at the Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110.
Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the

full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 30403

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 48
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data were collected by the County of San Diego from August 2003 through December 2007. A total of 236 single samples were collected with 48 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110.
Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from August 2003 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 31227

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through October 2007. A total of 142 dry month (April through October) single samples were collected with 28 dry month geomeans calculated. None of the 28 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	

LOE ID:	31228
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through October 2007. A total of 140 dry month (April through October) single samples were collected with 28 dry month geomeans calculated. None of the 28 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110.
Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from August 2003 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 31229

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 28
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from August 2004 through October 2007. A total of 142 dry month (April through October) single samples were collected with 28 dry month geomeans calculated. None of the 28 geomeans exceeded the geomean water quality objective. .

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110.
Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from August 2003 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue**

LOE ID:	75001
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 146 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Stub Jetty site, south of the San Diego River outlet, near Cape May Avenue.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue**

LOE ID:	30394
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	22
Number of Exceedances:	12
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. The number of samples collected for total coliform analysis was 249 with 22 of the samples correlated with a storm event. Twelve of the storm samples exceeded the single sample maximum total coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	

LOE ID:	30845
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	227
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. The number of samples collected for total coliform analysis was 249 of which 227 are dry weather (AB411) samples and none of those samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110.
Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from August 2003 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 30419

Pollutant: Indicator Bacteria

LOE Subgroup: Health Advisories

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555

Number of Exceedances: 13

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were 13 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation: Beach advisories were posted at San Diego River Mouth at Stub Jetty, San Diego, CA.

Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	

LOE ID:	30639
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	227
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. A total of 249 single samples were collected of which 227 are dry weather (AB411) samples with 10 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44221, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	

LOE ID:	30740
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	224
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from August 2003 through December 2007. A total of 246 single samples were collected of which 224 are dry weather (AB411) samples with three of the samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stub Jetty, south of the San Diego River outlet, near Cape May Avenue, Station id PL110. Lat/ Long: 32.756700/ -117.251700.
Temporal Representation:	Samples were collected weekly from August 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

DECISION ID	49383	Region 9
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2025
Implementation Action Other than TMDL:	The new trash control objectives apply. The trash found at this site, during cleanups that occurred on 11/22/08 and 11/28/09, are considered exceedances. The objectives are implemented as a conditional prohibition of discharge. Trash control amendments are the regulatory actions to be taken.
Impairment from Pollutant or Pollution:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d)

List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 11/22/08 and 11/28/09 for this water body. The total weight of trash (lbs) collected on these dates was 748.25. Using the metric, Coastkeeper classified this water body as medium for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49383, Trash

Region 9

Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue

LOE ID: 75025

Pollutant: Trash
LOE Subgroup: Pollutant-Nuisance
Matrix: Not Recorded
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality: The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 11/22/08 and 11/28/09 for this water body. The total weight of trash (lbs) collected on these dates was 748.25. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.

Data Reference: [Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Ocean Beach Jetty.
Temporal Representation: Two cleanups occurred on 11/22/08 and 11/28/09.

Environmental Conditions:
QAPP Information: San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach](#)
Water Body ID: CAC9071100020091104131050
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44291	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and [SECTION] of the Listing Policy. Under [SECTION] of the Policy, a minimum of one line of evidence is needed to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of 60 geomean samples collected prior to 2008 exceeded the water quality objective for enterococcus and with the latest data, 168 of 705 single samples exceed the SSM WQO for total coliform for SHELL and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches/creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID: 31234
Pollutant: Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 364 dry month (April through October) single samples were collected with 57 dry month geomeans calculated. One of the 57 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	30411
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 505 with 28 samples correlated with a storm event. Four of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	30407
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	508
Number of Exceedances:	47
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 508 single samples were collected with 47 of the samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID: 30406

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 6

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 508 single samples were collected with 24 samples correlated with a storm event. Six of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.

Temporal Representation: Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.

Environmental Conditions:
QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID: 31236

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 441 dry month (April through October) single samples were collected with 60 dry month geomeans calculated. One of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	30846
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	477
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. The number of samples collected for total coliform analysis was 505 of which 477 are dry weather (AB411) samples with six of those samples exceeding the single sample maximum total coliform standard.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	30405
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	83
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 508 single samples were collected with 83 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.

Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID:	30401
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	492
Number of Exceedances:	66
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 492 single samples were collected with 66 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID:	30400
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 492 single samples were collected with 27 samples correlated with a storm event. Nine of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach		
LOE ID:	30399	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	85	
Number of Exceedances:	13	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data were collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 492 single samples were collected with 85 monthly geomeans calculated. Thirteen of the geomeans exceeded the geomean water quality objective.	

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID:	75029
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 188 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Diego River outlet site near Dog Beach.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID:	75028
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	200
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach to determine beneficial use support and results are as follows: 19 of 200 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach was collected at 1 monitoring site [San Diego River outlet]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/25/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	75027
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 189 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the San Diego River outlet site at Dog Beach.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID:	75026
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	11
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eleven of the 189 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Diego River outlet at Dog Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID:	30397
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	28
Number of Exceedances:	18
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. The number of samples collected for total coliform analysis was 505 with 28 of the samples correlated with a storm event. Eighteen of the storm samples exceeded the single sample maximum total

coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -117.251700.

Temporal Representation: Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.

Environmental Conditions: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID: 30396

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 505
Number of Exceedances: 149

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. The number of samples collected for total coliform analysis was 505 with 149 samples exceeding the single sample maximum total coliform standard for shellfish harvesting.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010.
Lat/ Long: 32.756700/ -177.251700.

Temporal Representation: Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID: 77659

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 187
Number of Exceedances: 34

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Thirty-four of the 187 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach.

Temporal Representation: The samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID: 31393

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	484
Number of Exceedances:	41
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 508 single samples were collected of which 484 are dry weather (AB411) samples with 41 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	30418
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	154
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 154 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Beach advisories were posted at San Diego River Mouth at Dog Beach, San Diego, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	30412
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	505
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. The number of samples collected for total coliform analysis was 505. Ten of the samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.

Temporal Representation: Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID: 30413

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 87

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007. The number of samples collected for total coliform analysis was 505 with 87 monthly geomeans calculated. Only one of the geomeans exceeded the geomean water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.

Temporal Representation: Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID:	30640
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	465
Number of Exceedances:	57
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 1999 through October 2002, and April 2003 through December 2007. A total of 492 single samples were collected of which 465 are dry weather (AB411) samples with 57 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from January 1999 through October 2002, and April 2003 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	

LOE ID:	30369
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1501
Number of Exceedances:	310
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Diego HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Diego HU and is considered by the Regional Board to be applicable

to this more specific segment (at the San Diego River outlet, at Dog Beach) formed from the split.

A total of 1,501 analyses were performed from 1999 through 2003. Of these, there were 75 out of 476 exceedances for enterococcus standards, 56 out of 493 exceedances for single-sample fecal coliform criteria and 96 out of 493 30-day average exceedances. For total coliform, there were 83 out of 532 exceedances. Exceedances occurred during both wet and dry seasons (City of San Diego, 2004).

Data Reference: [Placeholder reference 2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: San Diego RWQCB Basin Plan 1994:
Enterococcus: 35 colonies/100 ml (30-day average), 104 colonies per 100 ml (single sample).
Fecal coliform (FC): 200 colonies/100 mL (30-day average), 400 colonies/100mL(single sample).
Total coliform (TC): 1,000 colonies/100 mL (30-day average), 10,000 colonies/100 mL (single sample, FC/TC ratio is <0.1), 1,000 colonies/100mL (single sample, FC/TC ratio is >0.1).

Objective/Criterion Reference: [Placeholder reference 2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: San Diego River Mouth (a.k.a. Dog Beach). This site is located on the south side of the mouth of the San Diego River. "Ten stations were monitored at the San Diego River mouth site during this time: one at the sampling site, eight as far as 2,000 ft. to the left, and one 100 ft to the right of the site."

Temporal Representation: Data were available for this assessment from 01/1999 through 10/2003. Samples were collected during both the wet and dry seasons.

Environmental Conditions: There were several sewage spills from 1999 through 2003 that impacted the site. However, there were not enough elevated bacterial levels associated with the spills to reduce the total number of exceedances below the allowable threshold.

Southern California has three distinct weather/hydrological conditions: summer dry weather, winter dry weather, and storm events. The data set used in this analysis includes summer and winter season data. Whether or not storm event samples are included in the data set are not known. For future water quality assessments, the RWQCB may classify bacteria samples as summer dry, winter dry, or storm event samples to ensure adequate representation of all three weather/hydrological conditions.

QAPP Information: QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44291, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach

LOE ID: 31233

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 13

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 1999 through October 2007. A total of 440 dry month (April through October) single samples were

	collected with 60 dry month geomeans calculated. Thirteen of the 60 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Diego HU, at the San Diego River outlet, at Dog Beach, Station id FM-010. Lat/ Long: 32.756700/ -177.251700.
Temporal Representation:	Samples were collected weekly from April 1999 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park](#)
Water Body ID: CAC9051100020091026214529
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43539	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park		

Pollutant: Indicator Bacteria
Final Listing Decision: Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, zero of 74 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1, and 11 of 151 samples exceed the SSM WQO for total coliform for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, zero of 74 geomean samples exceed the water quality objective (WQO) for enterococcus for the protection of REC-1, and 11 of 151 samples exceed the SSM WQO for total coliform for the protection of SHELL and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park	

LOE ID: 31211
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 91 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	30371
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Dieguito HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Dieguito HU and is considered by the Regional Board to be applicable to this more specific segment

formed from the split.

Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: Unspecified
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID: 30378

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with 26 monthly geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park**

LOE ID:	30379
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	94
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park**

LOE ID:	30389
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with 26 monthly geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park	

LOE ID:	30848
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples of which 93 are dry weather (AB411) samples were collected with none of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego. 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID: 30642

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 93

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected of which 93 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego. 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park**

LOE ID:	30372
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with one sample correlated with a storm event. This sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park**

LOE ID:	30374
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	94
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with 10 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	30377
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with one sample correlated with a storm event. No sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of Orange. Quality Assurance/Quality Control Manual. February 2004
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	30390
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	64
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Seascape Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascape Beach Park

LOE ID:	30391
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 94 single samples were collected with 1 sample correlated with a storm event. None exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascape Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	30417
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	73
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were 73 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	Beach advisories were posted at San Dieguito River Beach, Del Mar, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	30383
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 55 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	30384
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 55 single samples were collected and 16 geomeans calculated. None of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascape Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascape Beach Park

LOE ID:	30385
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 55 single samples were collected with no sample correlated with a storm event. No sample exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006](#)

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID: 77661

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 47
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Zero of the 47 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park.

Temporal Representation: The samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID: 75055

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 48 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Seascapes Beach Park site.
Temporal Representation:	Samples were collected from April 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	75056
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 48 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Seascapes Beach Park site.
Temporal Representation:	Samples were collected from April 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park**

LOE ID:	75057
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park to determine beneficial use support and results are as follows: 1 of 57 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park was collected at 1 monitoring site [Seascapes Beach Park]
Temporal Representation:	Data was collected over the time period 4/17/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park**

LOE ID:	75058
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 48 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Seascapes Beach Park site.
Temporal Representation:	Samples were collected from April 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park	

LOE ID:	31209
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 91 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43539, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park

LOE ID:	31210
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 52 dry month (April through October) single samples were collected with 15 dry month geomeans calculated. None of the 15 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Seascapes Beach Park, San Diego, California. Station identification number is EH-390.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach](#)
Water Body ID: CAC9051100020091026215544
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43899	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. With the latest data, 95 of 457 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, 95 of 457 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	

LOE ID: 30386
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 183 single samples were collected and 30 geomeans calculated. None of the 30 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30387
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	183
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 183 single samples were collected with 8 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30641
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	279
Number of Exceedances:	11
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 286 single samples were collected of which 279 are dry weather (AB411) samples with 11 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
[County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID: 30380

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 286 single samples were collected with 7 samples correlated with a storm event. Two of the 7 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30381
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 286 single samples were collected with 44 monthly geomeans calculated. Three of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30388
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 287 single samples were collected with 44 monthly geomeans calculated. Two of the 44 geomeans exceeded the geomean water quality

Data Reference:	objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	31221
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 193 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. Two of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	

LOE ID:	31226
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 193 dry month (April through October) single samples were collected with 25 dry month geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	

LOE ID:	77660
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	155
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Fifteen of the 155 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	75030
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	157
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 157 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the San Dieguito Lagoon Mouth site at San Dieguito River Beach.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	

LOE ID:	75031
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 156 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Dieguito Lagoon Mouth at San Dieguito River Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	

LOE ID:	75053
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	170
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach to determine beneficial use support

and results are as follows: 16 of 170 samples exceed the criterion for Coliform, Total.
[Data for Region 9 Beach Watch.](#)

Data Reference:

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach was collected at 1 monitoring site [San Dieguito River outlet]

Temporal Representation: Data was collected over the time period 1/9/2008-8/26/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	

LOE ID: 75054

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 156

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 156 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at San Dieguito Lagoon Mouth at San Dieguito River Beach site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	

LOE ID: 30370

Pollutant: Indicator Bacteria

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006. For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Dieguito HU' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Dieguito HU and is considered by the Regional Board to be applicable to this more specific segment formed from the split.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30741
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	179
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 183 single samples were collected of which 179 are dry weather (AB411) samples with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual. February 2004 County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30847
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	280
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 287 single samples were collected of which 280 are dry weather (AB411) samples with one of those samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID: 30382

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 183 single samples were collected with 4 samples correlated with a storm event. One of the 4 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Comparisons are also made only for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	31225
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from June 2004 through October 2007. A total of 112 dry month (April through October) single samples were collected with 16 dry month geomeans calculated. None of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from June 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30373
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	287
Number of Exceedances:	79
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 287 single samples were collected with 79 samples

Data Reference:	exceeded the single sample water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30375
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 287 single samples were collected with 7 samples correlated with a storm event. Four of the 7 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005,

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#) [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID: 30376

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 286

Number of Exceedances: 13

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 286 single samples were collected with 13 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#) [Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#) [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30416
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	73
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2001 to December 2007, there were 73 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>California Code of Regulations. Title 17, Section 7960.</p> <p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.</p>
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Spatial Representation:	Beach advisories were posted at San Dieguito River Beach, Del Mar, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach**

LOE ID:	30392
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	287
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 287 single samples were collected with 2 samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004 County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43899, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach

LOE ID:	30393
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 287 single samples were collected with 7 samples correlated with a storm event. One of the 7 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at San Dieguito River Beach, San Diego, California. Station identification number is EH-380.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
[County of Orange. Quality Assurance/Quality Control Manual. February 2004](#)
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street](#)
Water Body ID: CAC9041000020091025211542
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44540	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, one of the 57 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, one of the 57 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	30573
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97

Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected of which 97 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

LOE ID:	30452
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

Region 9

LOE ID: 30453

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 59

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 59 single samples were collected with one sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).
Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

Region 9

LOE ID:	30454
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 59 single samples were collected and 16 geomeans calculated. One of the 16 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	30455
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 59 single samples were collected with one sample correlated with a storm event. This sample did not exceed the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

Region 9

LOE ID:	30447
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there were no beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County

[Beach Closure and Advisory Report](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Wisconsin Street on Oceanside City Beach, Oceanside, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

LOE ID:	30810
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected of which 97 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	30448
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with three samples correlated with a storm event. One of the three samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

Region 9

LOE ID: 30449

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 100
Number of Exceedances: 8

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with eight samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

Region 9

LOE ID: 30450

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 1

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with three samples correlated with a storm event. One of the three samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

LOE ID:	30451
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with 25 monthly geomeans calculated. One of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

LOE ID:	30695
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 59 single samples were collected of which 58 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.

Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	30456
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with 25 monthly geomeans calculated. None of the 25 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	30457
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

Region 9

LOE ID:	30458
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 100 single samples were collected with three samples correlated with a storm event. None of the three samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	31342
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 101 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. One of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

LOE ID: 31343

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 17

Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 60 dry month (April through October) single samples were collected with 17 dry month geomeans calculated. One of the 17 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Objective/Criterion Reference: [Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml \(SWRCB, 2005\).](#)
[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria **Region 9**

Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

LOE ID: 31344

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 101 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Zero of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Wisconsin Street, Oceanside, California. Station identification number is EH-490.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	74694
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 32 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Wisconsin Street site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	74716
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 32 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Wisconsin Street site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	74717
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street was collected at 1 monitoring site [Wisconsin Street]
Temporal Representation:	Data was collected over the time period 4/3/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street	

LOE ID:	74718
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 32 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Wisconsin Street site.
Temporal Representation:	Samples were collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 44540, Indicator Bacteria
Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street

Region 9

LOE ID:	77628
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 32 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Wisconsin Street.
Temporal Representation:	The samples were collected from April 2008 through October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street](#)
Water Body ID: CAC9042100020091025220232
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44709	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, 14 of the 170 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, 14 of the 170 samples exceeded the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street	

LOE ID:	30459
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	185

Number of Exceedances:	15
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 15 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID:	30460
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	16
Number of Exceedances:	8
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 16 samples correlated with a storm event. Eight of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
	Comparisons are also made for days with matching bacteria and storm event data. A storm

Objective/Criterion Reference:	event was defined as 0.2 inches of rainfall within a 72 hour period. Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street	

LOE ID:	30469
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 16 samples correlated with a storm event. One of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID: 30468

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID:	30467
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>For the period from January 2001 to December 2007, there were four beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.</p> <p>Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.</p>
Data Reference:	Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>California Code of Regulations. Title 17, Section 7960.</p> <p>(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.</p>
Objective/Criterion Reference:	California Code of Regulations, Title 17, Section 7960
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Bacteriological monitoring samples were collected at Cassidy Street on Oceanside Beach, Oceanside, CA.
Temporal Representation:	The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:	
QAPP Information:	Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID:	30466
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with five samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID:	30805
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	169
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 169 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory. Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID:	30569
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	169
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 169 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s): [County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID: 31283

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 103 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID: 31281

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 103 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from July 2002 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID:	31280
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 103 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. Two of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation: Samples were collected from July 2002 through October 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street	

LOE ID: 74830

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 126
Number of Exceedances: 12

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Twelve of the 126 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Oceanside, at Cassidy Street site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street	

LOE ID: 74850

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	44
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street to determine beneficial use support and results are as follows: 6 of 44 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street was collected at 1 monitoring site [Cassidy Street]
Temporal Representation:	Data was collected over the time period 1/9/2008-8/9/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street	

LOE ID:	77621
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	126
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Thirteen of the 126 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street.
Temporal Representation:	The samples were collected from January 2008 through August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID: 74851

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 126
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 126 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Oceanside, Cassidy Street site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID: 30465

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16
Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 16 samples correlated with a storm event. Four of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID:	74831
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 126 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Oceanside, Cassidy Street site.

Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID: 30464

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected and 44 geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID: 30691

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	169
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected of which 169 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria
Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

Region 9

LOE ID:	30463
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with seven samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID: 30462

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16
Number of Exceedances: 5

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 16 samples correlated with a storm event. Five of the 16 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005.](#)
[Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach

monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID: 30461

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 44
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with 44 monthly geomeans calculated. Two of the 44 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Objective/Criterion Reference: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44709, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street

LOE ID: 30470

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 185 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Cassidy Street, Oceanside, California. Station identification number is OC-020.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth](#)
Water Body ID: CAC9041000020091104171140
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43811	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources Nonpoint Source Point Source Source Unknown
Expected TMDL Completion Date:	2019
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Based on the place holder LOE, this water body is a split segment of a water body previously demonstrated impaired for indicator bacteria. No new information is available to demonstrate improvement of water quality at this segment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Based on the place holder LOE, this water body is a split segment of a water body previously demonstrated impaired for indicator bacteria. No new information is available to demonstrate improvement of water quality at this segment.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43811, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth	

LOE ID:	30472
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	<p>Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.</p> <p>For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, Loma Alta HSA' was split into smaller segments and each represents an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Loma Alta Creek mouth' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, Loma Alta HSA and is considered by the Regional Board to be applicable to this more specific segment formed from the split.</p>
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	49825	Region 9
Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 6/9/07, 6/14/08, 6/13/09 and 6/12/10 for this water body. The total weight of trash

(lbs) collected on these dates was 1,028.8. However, using the metric, Coastkeeper classified this water body as severe for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.

3. This process is scientifically defensible and reproducible.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49825, Trash

Region 9

Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth

LOE ID:	74689
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 6/9/07,6/14/08, 6/13/09 and 6/12/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,028.8. However, using the metric, Coastkeeper classified this water body as severe for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Oceanside - Buccanneer Beach.
Temporal Representation:	Four cleanups that occurred on 6/9/07,6/14/08, 6/13/09 and 6/12/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP provided.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach \(Cottonwood Creek outlet\)](#)
Water Body ID: CAC9045100020091026142908
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43762	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and [SECTION] of the Listing Policy. Under [SECTION] of the Policy, a minimum of one line of evidence is needed to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
3. With the latest data, 99 of 427 samples and 59 of 155 samples exceed the water quality objectives for total coliform of a single sample maximum of 230/100ml and of a geomean in a 30-day period of 70/100 ml, respectively, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Bacteria TMDL for 20 beaches and creeks was approved by USEPA on 06/22/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID: 30474

Pollutant: Indicator Bacteria

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	For the 2008 assessment , the 2006 listed coastline 'Pacific Ocean Shoreline, San Marcos HA' was renamed Batiquitos HSA and was split into smaller segments that each represent an area near the sampling location of the data being assessed. This segment 'Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)' is one of the sampling locations. This LOE is a copy of the 2006 listing placeholder LOE for Pacific Ocean Shoreline, San Marcos HA and is considered by the Regional Board to be applicable to this more specific segment formed from the split. Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	77585
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	155
Number of Exceedances:	59
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Fifty nine of the 155 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the

Objective/Criterion Reference:	objectives were taken. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet).
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	30477
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with 38 monthly geomeans calculated. One of the 38 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	30480
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 166 single samples were collected and 29 geomeans calculated. None of the 29 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	30481
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	166
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 166 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.

Temporal Representation:

Samples were collected from March 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID: 30482

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3

Number of Exceedances: 1

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 166 single samples were collected with three samples correlating with a storm event. One of the three samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference:

[National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.

Temporal Representation:

Samples were collected from March 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID: 30483

Pollutant: Indicator Bacteria
LOE Subgroup: Health Advisories
Matrix: -N/A
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2555
Number of Exceedances: 78

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: For the period from January 2001 to December 2007, there were and 78 beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.

Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.

Data Reference: [Department of Environmental Health, Land and Water Quality Division, San Diego County Beach Closure and Advisory Report](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Bacteriological monitoring samples were collected at Moonlight beach in Encinitas, CA.
Temporal Representation: The beach advisory covers the time frame of January January 2001 to December 2007.
Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	30484
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with five samples correlating with a storm event. None of the five samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	30486
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with 38 monthly geomeans calculated. None of the 38 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	31246
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 124 dry month (April through October) single samples were collected with 20 dry month geomeans calculated. None of the 20 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from July 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	31247
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 202 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from July 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	31245
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from July 2002 through October 2007. A total of 202 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. 1 of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from July 2002 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	30475
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with five samples correlating with a storm event. Two of the five samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	30485
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	258
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID: 30792

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 253
Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected of which 253 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.

Temporal Representation: Samples were collected from March 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID: 30556

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	253
Number of Exceedances:	20
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected of which 253 are dry weather (AB411) samples with 20 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	74552
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 156 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Cottonwood Creek outlet site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	74553
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 156 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Cottonwood Creek outlet site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID:	74554
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	169
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet) to determine beneficial use support and results are as follows: 19 of 169 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100

Objective/Criterion Reference: mL.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet) was collected at 1 monitoring site [Cottonwood Creek outlet]

Temporal Representation: Data was collected over the time period January 2008 through August 2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID: 74555

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 156

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 156 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Cottonwood Creek outlet site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	

LOE ID: 30678

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 163

Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 166 single samples were collected of which 163 are dry weather (AB411) samples with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	30478
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with five samples correlating with a storm event. One of the five samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.

Temporal Representation:

Samples were collected from March 2004 through December 2007.

Environmental Conditions:

Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43762, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID: 30479

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 258
Number of Exceedances: 21

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with 21 samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.

Temporal Representation:

Samples were collected from March 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	30476
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	258
Number of Exceedances:	80
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from March 2004 through December 2007. A total of 258 single samples were collected with 80 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Moonlight State Beach (Cottonwood Creek outlet), San Diego, California. Department of Environmental Health identification number is EH-420.
Temporal Representation:	Samples were collected from March 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

DECISION ID

49675

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to

determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 1/13/07, 1/12/08, 1/10/09, 2/19/10, and 7/17/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,143, using the metric, Coastkeeper classified this water body as high for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49675, Trash

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)

LOE ID:	74556
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 1/13/07, 1/12/08, 1/10/09, 2/19/10, and 7/17/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,143. However, using the metric, Coastkeeper classified this water body as high for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Encinitas - Moonlight Beach.
Temporal Representation:	Five cleanups that occurred on 1/13/07, 1/12/08, 1/10/09, 2/19/10, and 7/17/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C](#)
Water Body ID: CAC9101000020091116110416
Water Body Type: Coastal & Bay Shoreline

DECISION ID	44567	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, zero of the 15 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, zero of the 15 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID:	30493
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	311

Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with 2 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID:	74615
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 176 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the NASNI Beach/North Beach "C" site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

LOE ID: 30684

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 188
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected of which 188 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

LOE ID: 30492

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6

Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria		Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C		
LOE ID:	30494	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	6	
Number of Exceedances:	0	
Data and Information Type:	PWS pathogen monitoring (ambient water)	
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water	

quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID: 30488

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 6
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with 6 samples correlated with a storm event. One of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program,](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C", Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period. Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego. 2006. Department Public Health Laboratory. Quality Assurance Manual. December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID:	30489
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	311
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

LOE ID: 31265

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26

Number of Exceedances: 0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 184 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.

Temporal Representation:

Samples were collected from April 2004 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

LOE ID:	31264
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 105 dry month (April through October) single samples were collected with 17 dry month geomeans calculated. None of the 17 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID:	31263
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 184 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the

Data Reference:	geomean water quality objective. Department of Environmental Health, Ocean & Bay Recreational Water Quality Program. 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C", Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

LOE ID:	30498
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there was one beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards. Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County Beach Closure and Advisory Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960. (a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the

Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at Naval Air Station North Island, North Beach C, Coronado, CA.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

LOE ID:

30497

Pollutant:

Enterococcus

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:

None

Beneficial Use:

Water Contact Recreation

Number of Samples:

45

Number of Exceedances:

0

Data and Information Type:

PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:

Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with 45 monthly geomeans calculated. None of the 45 geomeans exceeded the geomean water quality objective.

Data Reference:

[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at NASNI Beach/North Beach "C", Coronado, California. Station identification number is EH-062.

Temporal Representation:

Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID: 30496

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 31
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected and 31 geomeans calculated. None of the 31 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:
QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID: 30491

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 194
Number of Exceedances: 0

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 194 single samples were collected with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID:	30490
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with 6 samples correlated with a storm event. None of the 6 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml

Objective/Criterion Reference: (SWRCB, 2005). [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions: Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID: 77595

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 176

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: None of the 176 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C.

Temporal Representation: The samples were collected from January 2008 through August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID:	30487
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	311
Number of Exceedances:	6
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with 6 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C

Region 9

LOE ID:	74611
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	190
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C to determine beneficial use support and results are as follows: 0 of

190 samples exceed the criterion for Coliform, Total.
[Data for Region 9 Beach Watch.](#)

Data Reference:

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C was collected at 1 monitoring site [NASNI beach / North Bch 'C']

Temporal Representation: Data was collected over the time period 1/3/2008-8/26/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID: 74610

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 158

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 158 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the NASNI Beach/North Beach "C" site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID: 74609

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 176 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the NASNI Beach/North Beach "C" site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID:	30563
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	305
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected of which 305 are dry weather samples (AB411) with 2 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID:	30495
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;
	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 44567, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C	

LOE ID:	30798
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	305
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 311 single samples were collected of which 305 are dry weather (AB411) samples with no sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at NASNI Beach/North Beach "C" Coronado, California. Station identification number is EH-062.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd](#)
Water Body ID: CAC9101000020091103232330
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43583	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, two of the 229 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, two of the 229 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	74616
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 180 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Navy Fence/Ocean Blvd site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	74617
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	164
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 164 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Navy Fence/Ocean Blvd site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	74618
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	193
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd to determine beneficial use support and results are as follows: 3 of 193 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd was collected at 1 monitoring site [Navy Fence (A)]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID:	74619
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	179
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 179 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Navy Fence/Ocean Blvd site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID: 77596

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 180
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: None of the 180 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd.

Temporal Representation: The samples were collected from January 2008 through August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID: 30506

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 335
Number of Exceedances: 18

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 18 samples

Data Reference:	<p>exceeding the single sample water quality objective.</p> Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Enterococcus density shall not exceed 35 per 100 ml.</p> <p>Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).</p>
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID:	30507
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	13
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	<p>Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 19 samples correlated with a storm event. Thirteen of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.</p>
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	<p>Geomean: Enterococcus density shall not exceed 35 per 100 ml.</p> <p>Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).</p> <p>Comparisons are also made for days with matching bacteria and storm event data. A storm event is defined as 0.2 inches of rainfall within a 72 hour period.</p>

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	30508
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 44 monthly geomeans calculated. None of the 44 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID: 31266

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 0

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 190 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Enterococcus density shall not exceed 35 per 100 ml.

Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.

Temporal Representation: Samples were collected from April 2004 through October 2007.

Environmental Conditions:

QAPP Information:

Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID: 31267

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 110 dry month (April through October) single samples were collected with 18 dry month geomeans calculated. None of the 18 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID:	31268
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from April 2004 through October 2007. A total of 190 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from April 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

**Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd**

Region 9

LOE ID:	30500
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	335
Number of Exceedances:	29
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 29 samples exceeded the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID:	30501
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	19
Number of Exceedances:	14
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 19 samples correlated with a storm event. Fourteen of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007, AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan the median coliform density shall not exceed 70 per 100ml, and not more than 10 percent of the samples shall exceed 230 per 100ml (SWRCB, 2005). Comparisons are also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd**

LOE ID:	30502
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	335

Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 3 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

Region 9

LOE ID:	30503
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 19 samples correlated with a storm event. Three of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml;

Objective/Criterion Reference:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., San Diego, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	Comparisons were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Analyzing only storm water bacteria data is important because the majority of beach monitoring data covers the months of April through October. The data may not capture the full impacts of seasonal storm events and high bacteria levels due to storm water runoff because much of the wet season for Southern California occurs in November through March.
QAPP Information Reference(s):	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual. County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID:	30504
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	215
Number of Exceedances:	10
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 215 single samples were collected with 10 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.

Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	30505
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	7
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 215 single samples were collected with 19 samples correlated with a storm event. Seven of the 19 samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml; Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	30509
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 215 single samples were collected and 32 geomeans calculated. None of the 32 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean; Fecal coliform density shall not exceed 200 per 100 ml;
Objective/Criterion Reference:	Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	30510
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected with 49 monthly geomeans calculated. Two of the 49 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml. Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd	

LOE ID:	30799
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	316
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected of which 316 are dry weather (AB411) samples with zero samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml; Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

Region 9

LOE ID: 30685

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 196
Number of Exceedances: 3

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 215 single samples were collected of which 196 are dry weather (AB411) samples with three samples exceeding the single sample water quality objective.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean; Fecal coliform density shall not exceed 200 per 100 ml;

Single Sample Maximum; Fecal coliform density shall not exceed 400 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.

Temporal Representation: Samples were collected from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria
Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

Region 9

LOE ID: 30564

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	316
Number of Exceedances:	5
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 335 single samples were collected of which 316 are dry weather (AB411) samples with 5 samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml (SWRCB, 2005). Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Navy Fence/Ocean Blvd., Coronado, California. Station identification number is EH-060.
Temporal Representation:	Samples were collected from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43583, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd

LOE ID:	30499
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2555
Number of Exceedances:	4
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2001 to December 2007, there was four beach advisory days for this section of shoreline. Bacteriological samples are collected on a weekly basis at ocean and bay locations in San Diego County. When a bacteriological sample exceeds water quality standards, signs are posted indicating that an advisory for waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of San Diego in their annual San Diego County Beach Closure and Advisory Reports. The reporting period was from January 2001 - December 2007. Data used was the number of days the beach was advisories were issued when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	Department of Environmental Health, Land and Water Quality Division. San Diego County

[Beach Closure and Advisory Report](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference:

[California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

[Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Spatial Representation:

Bacteriological monitoring samples were collected at Naval Air Station North Island North Beach A, Coronado, CA.

Temporal Representation:

The beach advisory covers the time frame of January January 2001 to December 2007.

Environmental Conditions:

QAPP Information:

Samples were collected in compliance with County of San Diego's Quality Assessment/Quality Control document

QAPP Information Reference(s):

[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park](#)
Water Body ID: CAC9046100020091104120614
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43808	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. With the latest data, zero of 169 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, zero of 169 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park	

LOE ID:	30743
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171

Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected of which 171 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	30850
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	172
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188 of which 172 are dry weather (AB411) samples and none of those samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID: 30514

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 187

Number of Exceedances: 4

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 187 with 4 samples exceeding the single sample maximum total coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	30513
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188. Sixteen of the samples were correlated with a storm event. Three of the 16 storm samples exceeded the single sample maximum total coliform standard for shellfish harvesting. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	30521
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188. None of the samples exceeded the single sample maximum total coliform standard.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	30522
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from Samples were collected from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188 with 34 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID: 30516

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16

Number of Exceedances: 2

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with 16 samples correlated with a storm event. Two of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park**

LOE ID:	30517
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	3
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with three samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006, Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park**

LOE ID:	30519
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with 35 geomeans calculated. None of the geomeans exceeded the geomean water quality objective.

Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	30520
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	2
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with two samples exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID: 30518

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16
Number of Exceedances: 1

Data and Information Type: PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality: Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with 16 samples correlated with a storm event. Only one of the storm samples exceeded the single sample water quality objective. This information will not be used in determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;
Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).

Objective/Criterion Reference: Comparisons to water quality objectives were made for all data and data associated with storm events. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.
[Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID: 31203

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 108 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	31205
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 109 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005). Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	31204
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from May 2004 through October 2007. A total of 108 dry month (April through October) single samples were collected with 26 dry month geomeans calculated. None of the 26 geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml; Geomean: Fecal coliform density shall not exceed 200 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from May 2004 through October 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	30644
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected of which 171 are dry weather (AB411) samples with one sample exceeding the single sample water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
QAPP Information Reference(s):	County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park**

LOE ID:	30523
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Shoreline beach monitoring data was collected by the County of San Diego from January 2004 through December 2007. The number of samples collected for total coliform analysis was 188 with 16 samples correlated with a storm event. None of the storm samples exceeded the single sample water quality objective. This information will not be used in

determining a listing decision, but is of interest to the Regional Board and has been included here as additional anecdotal information.

Data Reference: [National Weather Service Forecast Office, San Diego, California, Chronological Regional Temperature and Precipitation Listings by Station](#)
[Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.

Temporal Representation: Samples were collected weekly from January 2004 through December 2007.

Environmental Conditions: Comparisons were also made for days with matching bacteria and storm event data. A storm event was defined as 0.2 inches of rainfall within a 72 hour period.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of San Diego's Quality beach monitoring program.

QAPP Information Reference(s): [County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID: 74710

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 134 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Seaside State Park site.
Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park**

LOE ID:	74709
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	137
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park to determine beneficial use support and results are as follows: 0 of 137 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park was collected at 1 monitoring site [Seaside State Park]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park**

LOE ID:	74708
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Seaside State Park site.

Temporal Representation:

Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID: 74687

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 134 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Seaside State Park site.

Temporal Representation:

Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID: 77665

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 134

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Zero of the 134 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43808, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park

LOE ID:	30515
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data were collected by the County of San Diego from January 2004 through December 2007. A total of 187 single samples were collected with 35 monthly geomeans calculated. None of the geomeans exceeded the geomean water quality objective.
Data Reference:	Department of Environmental Health, Ocean & Bay Recreational Water Quality Program, 2007. AB 411 monitoring data 1999 to 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml; Geomean: Enterococcus density shall not exceed 35 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the San Elijo HSA, from Seaside Beach, at Station SE-030, Lat/ Long : 33.00264/ -117.28735.
Temporal Representation:	Samples were collected weekly from January 2004 through December 2007.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion was conducted in accordance with the

QAPP Information Reference(s):

County of San Diego, Department Public Health Laboratory Quality Assurance Manual.
[County of San Diego, 2006. Department Public Health Laboratory, Quality Assurance Manual, December 2006](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Luis Rey River, Upper \(east of Interstate 15\)](#)
Water Body ID: CAR9031200020091029163808
Water Body Type: River & Stream

DECISION ID	51982	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the criterion or guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion or guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51982, Ammonia	Region 9
San Luis Rey River, Upper (east of Interstate 15)	

LOE ID: 76221
Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected on a single day 5/15/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 52072 Region 9	
San Luis Rey River, Upper (east of Interstate 15)	
Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52072, Arsenic
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID:	76234
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 52072, Arsenic
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID:	76222
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50752	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the guideline. The sample was not used in the assessment due to a reporting limit that was higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50752, Bifenthrin**Region 9****San Luis Rey River, Upper (east of Interstate 15)**

LOE ID:	76236
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID**49067****Region 9****San Luis Rey River, Upper (east of Interstate 15)**

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the beneficial use guidelines.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49067, Cadmium
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID:	76238
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 49067, Cadmium
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID:	76249
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected 5/15/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49067, Cadmium
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID:	76251
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 49067, Cadmium

Region 9

San Luis Rey River, Upper (east of Interstate 15)

LOE ID:	76250
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected 5/15/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50755	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of four samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of four samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50755, Chlorpyrifos	Region 9
San Luis Rey River, Upper (east of Interstate 15)	

LOE ID:	78124
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected over the time period 6/12/2006-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52077	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52077, Chromium	Region 9
San Luis Rey River, Upper (east of Interstate 15)	

LOE ID:	76252
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	52090	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of nine samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52090, Copper
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID:	75985
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected 5/15/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 52090, Copper
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID:	75986
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected 5/15/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52090, Copper
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID:	75987
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each

Objective/Criterion Reference:	sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52090, Copper
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID:	75988
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 50772
San Luis Rey River, Upper (east of Interstate 15)

Region 9

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline. The sample was not used in the assessment due to a reporting limit that was higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50772, Cypermethrin
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID: 75989

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

Guideline Reference:	average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012) Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	50774	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50774, Diazinon	Region 9
San Luis Rey River, Upper (east of Interstate 15)	

LOE ID:	76000
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected over the time period 6/12/2006-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50774, Diazinon

Region 9

San Luis Rey River, Upper (east of Interstate 15)

LOE ID:	78116
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Âµg/L.

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected over the time period 6/12/2006-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52100	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Lead Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the eight samples exceed the beneficial use guideline for Warm Freshwater Habitat use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the seven samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the eight samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 52100, Lead		Region 9
San Luis Rey River, Upper (east of Interstate 15)		

LOE ID: Pollutant: LOE Subgroup: Matrix: Fraction:	76004 Lead Pollutant-Water Water Dissolved
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Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected 5/15/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52100, Lead
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID:	76016
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]

Temporal Representation: Data was collected on a single day 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 52100, Lead
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID: 76003

Pollutant: Lead

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]

Temporal Representation: Data was collected 5/15/2003 - 6/9/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 50788
San Luis Rey River, Upper (east of Interstate 15)

Region 9

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50788, Malathion
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID: 78117

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected over the time period 6/12/2006-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52103	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52103, Nickel		Region 9
San Luis Rey River, Upper (east of Interstate 15)		

LOE ID:	76017
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	51978	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the beneficial use guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51978, Nitrate/Nitrite (Nitrite + Nitrate as N)
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID: 76019

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]

Temporal Representation: Data was collected on a single day 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 51978, Nitrate/Nitrite (Nitrite + Nitrate as N)
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID: 76018

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east

Data Reference:	of Interstate 15) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected over the time period 5/16/2003-9/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51981	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the beneficial use guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51981, Nitrogen, Nitrite	Region 9
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San Luis Rey River, Upper (east of Interstate 15)

LOE ID:	76039
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 51981, Nitrogen, Nitrite**Region 9****San Luis Rey River, Upper (east of Interstate 15)**

LOE ID:	76038
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected over the time period 5/15/2003-9/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50800	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of 12 samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 12 samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50800, Temperature, water	Region 9
San Luis Rey River, Upper (east of Interstate 15)	

LOE ID:	76040
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of the 12 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected at the following stations: SLR-060-Couser Canyon bridge SLR-090-CNF picnic site
Temporal Representation:	Samples were collected between February, 2009 and December, 2009.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

DECISION ID	52107	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the eight samples exceed the beneficial use guideline for Warm Freshwater Habitat use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the seven samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the eight samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52107, Zinc
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID:	76057
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River, Couser Cyn Rd. - 903_SMC01717]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 52107, Zinc
San Luis Rey River, Upper (east of Interstate 15)**

Region 9

LOE ID: 76056

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected 5/15/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52107, Zinc
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID:	76042
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected 5/15/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51700	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 6 of 8 samples exceed the water quality objective for enterococcus of 61/100ml in fresh water for the protection of REC-1..</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Data from 2003 to 2009 show that 6 of 8 samples exceed the water quality objective for enterococcus of 61/100ml in fresh water for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 51700, Indicator Bacteria	Region 9
San Luis Rey River, Upper (east of Interstate 15)	

LOE ID:	76002
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Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]
Temporal Representation:	Data was collected over the time period 5/15/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51700, Indicator Bacteria

Region 9

San Luis Rey River, Upper (east of Interstate 15)

LOE ID:	76001
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]

Temporal Representation: Data was collected over the time period 5/15/2003-6/9/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51700, Indicator Bacteria
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID: 76041

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 8

Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Luis Rey River, Upper (east of Interstate 15) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxicsubstances in concentrations which are toxic to,or which produce detrimental physiologicalresponses in human, plant, animal, or indigenousaquatic life (Basin Plan).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).

Guideline Reference: [Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.](#)

Spatial Representation: Data for this line of evidence for San Luis Rey River, Upper (east of Interstate 15) was collected at 1 monitoring site [San Luis Rey River @ Couser Canyon Pass]

Temporal Representation: Data was collected over the time period 5/15/2003-6/9/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 34619
San Luis Rey River, Upper (east of Interstate 15)

Region 9

Pollutant: Selenium

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
Do Not List on 303(d) list (TMDL required list)(2012)

Original
Pollutant

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. None of the three samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of three samples exceeded the selenium water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34619, Selenium
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID: 30917

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Eight water samples were collected at San Luis Rey River station 903SLSLR2 on May 2004, September 2004, March 2005, and April 2005. None of the three samples showed excessive selenium concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Water samples were collected at San Luis Rey River station 903SLSLR2.
Temporal Representation: Samples were collected on May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:
QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):

DECISION ID	44436	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 one line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of four samples exceeded the sulfate water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44436, Sulfates	Region 9
San Luis Rey River, Upper (east of Interstate 15)	

LOE ID:	30916
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Eight water samples were collected at San Luis Rey River station 903SLSLR2 on May 2004, September 2004, March 2005, and April 2005. None of four samples showed excessive sulfate concentrations according to results in California's Surface Water Ambient Monitoring Program Report, 2007.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at San Luis Rey River station 903SLSLR2.
Temporal Representation:	Samples were collected on May 2004, September 2004, March 2005, and April 2005.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	35149	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Four of the four samples exceed the water quality objective for Phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of four samples exceeded the water quality objective for Phosphorus and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

Line of Evidence (LOE) for Decision ID 35149, Phosphorus**Region 9****San Luis Rey River, Upper (east of Interstate 15)**

LOE ID:	30947
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	22
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty-seven samples of IBI data were taken from May 1998 to 2007 at six sampling sites. Of the total number of samples, twenty-two of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at eight sites: 903SLSLR3, 903SLSLR6, 903SLRR39, 903SLRRPG, 903SLR3, and 903WE0798 on San Luis Rey River.
Temporal Representation:	Sampling occurred during one to seven events annually from May 1998 to 2007 except in 2002.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 35149, Phosphorus**Region 9****San Luis Rey River, Upper (east of Interstate 15)**

LOE ID: 30945

Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All four samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, 2004, September 13- 14, 2004, March 1- 2, 2005, April 18-20, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at station San Luis Rey River 2 (station id: 903SLSLR2 lat/long: 33.26190/-116.80889)
Temporal Representation:	Samples were collected at each site on the following four dates, May 18-19, 2004, September 13- 14, 2004, March 1- 2, 2005, April 18- 20, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third occurred between storm events and the fourth during high base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	35862	Region 9
San Luis Rey River, Upper (east of Interstate 15)		

Pollutant:	Total Nitrogen as N
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle. (with update to table 3.1)</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Five of the</p>

eight samples exceed the water quality objective for Nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of eight samples exceed the water quality objective for Nitrogen and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 35862, Total Nitrogen as N

Region 9

San Luis Rey River, Upper (east of Interstate 15)

LOE ID:	30946
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Five of eight samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected at each site on the following four dates, May 18-19, 2004, September 13-14, 2004, March 1-2, 2005, April 18- 20, 2005.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)</p> <p>A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin

Spatial Representation:	Samples were collected at monitoring station San Luis Rey River 2 (station id: 903SLSLR2 lat/long: 33.26190/-116.80889)
Temporal Representation:	Samples were collected at each site on the following four dates, May 18-19, 2004, September 13-14, 2004, March 1-2, 2005, April 18- 20, 2005.
Environmental Conditions:	The first two sampling events occurred during declining and minimum base flow respectively. The third sample occurred between storm events and the fourth during high base flow.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 35862, Total Nitrogen as N
San Luis Rey River, Upper (east of Interstate 15)

Region 9

LOE ID:	30947
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	22
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Twenty-seven samples of IBI data were taken from May 1998 to 2007 at six sampling sites. Of the total number of samples, twenty-two of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data 2007 SDRWQCB Bioassessment Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at eight sites: 903SLSLR3, 903SLSLR6, 903SLRR39, 903SLRRPG, 903SLR3, and 903WE0798 on San Luis Rey River.
Temporal Representation:	Sampling occurred during one to seven events annually from May 1998 to 2007 except in 2002.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.

QAPP Information Reference(s):

[State of California, California Monitoring and Assessment Program: "CMAP".](#)
[Quality Assurance Project Plan for the California Stream Bioassessment Procedure](#)
[The San Diego Stream Team Quality Assurance Project Plan](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Santa Ysabel Creek \(above Sutherland Reservoir\)](#)
Water Body ID: CAR9055300020091030161135
Water Body Type: River & Stream

DECISION ID	37541	Region 9
Santa Ysabel Creek (above Sutherland Reservoir)		

Pollutant: Alkalinity as CaCO₃ | Ammonia | Manganese | Nickel | Orthophosphate | Total Kjeldahl Nitrogen (TKN) | Total Suspended Solids (TSS)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status: Original
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion: These pollutants are being considered for placement on the section 303(d) list under section 3.1 and 3.2 of the Listing Policy. Under section 3.1 and 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess these pollutants. None of the 30 samples exceed the Basin Plan water quality objective for these multiple pollutants.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 30 samples exceed the Basin Plan water quality objective for these multiple pollutants, and this does not exceed the allowable frequency listed in Table 3.1 and 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37541, Multiple Pollutants	Region 9
Santa Ysabel Creek (above Sutherland Reservoir)	

LOE ID: 30951

Pollutant: Alkalinity as CaCO₃ | Ammonia | Manganese | Nickel | Orthophosphate | Total Kjeldahl Nitrogen (TKN) | Total Suspended Solids (TSS)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Not Recorded

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	30 samples were collected at Santa Ysabel Creek station 911TLAP04 during the months of January 2003, April 2003, and May 2003 for conventional inorganics analyses, none of the 30 samples exceeded evaluation concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Alkalinity as CaCO ₃ 20 mg/l, ammonia as N 0.025 mg/l, nitrite as N 1.mg/l, nitrogen total Kjeldahl (If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used), ortho phosphate as P total 0.05 mg/l, sulfate 250 mg/l, total suspended solids narrative: Waters shall not contain suspended solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Santa Ysabel Creek station 911TLAP04; (Latitude 33.1277, Longitude -116.6790). (Station name seems incorrect. Coordinates show 905YSA04.)
Temporal Representation:	Samples were collected during the months of January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality controls for chemical analyses were conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 37749 Region 9	
Santa Ysabel Creek (above Sutherland Reservoir)	
Pollutant:	Metals
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollution
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>These pollutants are being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess these pollutants. None of the 33 samples exceed the Basin Plan water quality objectives for these metal pollutants.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 33 samples exceed the Basin Plan water quality objectives for these metal pollutants and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 37749, Metals
Santa Ysabel Creek (above Sutherland Reservoir)****Region 9**

LOE ID:	30954
Pollutant:	Metals
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	33 samples were collected at Santa Ysabel Creek station 905SDYSA4 during the months of January 2003, April 2003, and May 2003 for metals analyses, none of the 33 samples exceeded evaluation concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level (MCL) for aluminum is 1. mg /l (ppb). Water Quality Control for the San Diego Basin. 2007. The dissolved chronic criterion for the following metals applies: arsenic 150 Åµg/l (ppb), cadmium 2.2 Åµg/l (ppb), copper 9.0 Åµg/l (ppb), selenium 5.0 Åµg/l (ppb), zinc 120 Åµg/l (ppb), chromium 11 Åµg/l (ppb), manganese 0.05 mg/l, nickel 52 Åµg/l (ppb), lead 2.5 Åµg/l (ppb), and silver 3.4Åµg/l (ppb). California Toxics Rule. 2007.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Santa Ysabel Creek station 905SDYSA4; (Latitude 33.1276, Longitude -116.6791).
Temporal Representation:	Samples were collected during the months of January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality controls for chemical analyses were conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 37145**Region 9****Santa Ysabel Creek (above Sutherland Reservoir)**

Pollutant:	Toxicity
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2021

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.9 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Five of the eight samples exceed the water quality objective for Toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the eight samples exceed the water quality objective for Toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>Region 9 data was not included in the 2012 Integrated Report so all decisions are carried over from the 2010 listing cycle.</p> <p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 37145, Toxicity
Santa Ysabel Creek (above Sutherland Reservoir)

Region 9

LOE ID:	30961
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Five samples of IBI data were taken from June 2000 to June 2005 at two sampling sites. Of the total number of samples, four of the samples exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at two sites: 905SYCH79 and 905WE0679 on Santa Ysabel Creek.
Temporal Representation:	Sampling occurred during one to two events every other year from June 2000 to June 2005.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 37145, Toxicity
Santa Ysabel Creek (above Sutherland Reservoir)

Region 9

LOE ID:	30958
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Two samples were collected at Santa Ysabel Creek station 905SDYSA4 in January and April 2003, they showed significant toxicity levels (SL) in the following tests: Hyalella azteca survival and growth- None of the two samples were toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Sediment samples were collected at a station on Santa Ysabel Creek 4 (905SDYSA4).
Temporal Representation:	Sample from Santa Ysabel Creek were collected on January 2003 and April 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37145, Toxicity

Region 9

Santa Ysabel Creek (above Sutherland Reservoir)

LOE ID:	30957
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Six samples were collected at Santa Ysabel Creek stations 905SDYSA4 and 905SDYSA7 from January to May 2003, they showed significant toxicity levels (SL) in the following tests: Selenastrum algae growth test - five of the six samples. Ceriodaphnia dubia survival/reproductive test - two of the six samples.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SL') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Water samples were collected at a station on Santa Ysabel Creek 4 (905SDYSA4) and Santa Ysabel Creek 4 (905SDYSA7).
Temporal Representation:	Water samples from Santa Ysabel Creek were collected on January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Santa Ysabel Creek \(below Sutherland Reservoir\)](#)
Water Body ID: CAR9052100020091030160355
Water Body Type: River & Stream

DECISION ID	49295	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49295, Alkalinity as CaCO₃	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID: 76649

Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected over the time period 4/29/2009-5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49295, Alkalinity as CaCO₃

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76650
Pollutant:	Alkalinity as CaCO ₃
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]

Temporal Representation:	Data was collected over the time period 4/29/2009-5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49310	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49310, Aluminum		Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

LOE ID:	76651
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49310, Aluminum
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76652
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49310, Aluminum

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76653
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51990	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Ammonia (Unionized)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceed the beneficial use guideline or objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective or guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51990, Ammonia (Unionized)

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76654
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples exceed the water objective for un-ionized ammonia (NH ₃) at 0.025 mg/l (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The calculated un-ionized ammonia (as N) values was then established and compared to the un-ionized Ammonia (as N) at 0.025 mg/L in the RB9 Basin Plan.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH ₃) to exceed 0.025 mg/l (as N) in inland surface waters, enclosed bays and estuaries and coastal lagoons.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 905PS0026 (Santa Ysabel Creek).
Temporal Representation:	Samples collected on 5/13/2008.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51990, Ammonia (Unionized)

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76655
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Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49312	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49312, Arsenic
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76656
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 49312, Arsenic
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76660
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49312, Arsenic
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76659
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was

Temporal Representation:	collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Environmental Conditions:	Data was collected on a single day 5/6/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed. Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49312, Arsenic
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76658
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49312, Arsenic
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76657
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51741		Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		
Pollutant:	Benthic Community Effects	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.	
Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects		Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	72792
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. The IBI score for this site was 56.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected from Santa Ysabel Creek below Clevenger Cyn. Cr.
Temporal Representation:	The sample was collected in April 2009.
Environmental Conditions:	
QAPP Information:	Samples were collected for the SWAMP RWB9 Stormwater Monitoring Council CY 2009.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects**Region 9****Santa Ysabel Creek (below Sutherland Reservoir)**

LOE ID:	76689
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and reproduction of <i>Ceriodaphnia dubia</i> . One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 905S01953.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76688
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects**Region 9****Santa Ysabel Creek (below Sutherland Reservoir)**

LOE ID:	76687
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects**Region 9****Santa Ysabel Creek (below Sutherland Reservoir)**

LOE ID:	76661
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body is 39 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 905SDYSA7-Santa Ysabel Creek 7
Temporal Representation:	Surveys done May 6, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76667
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76665
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Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	79545
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	A total of four samples were taken from four stations along Santa Ysabel Creek. The CSCI scores for this stream are above the 0.79 threshold, and therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Statewide Perennial Streams Assessment 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	905SDC-TWAS-2 905SDYSA7 905S01953 905PS0026
Temporal Representation:	Samples were collected in 2008 and 2009
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program. 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds. 2009.

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	72793
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. The IBI score for this site was 40.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are

converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference: [Development of a Benthic Index of Biotic Integrity \(B-IBI\) for Wadeable Streams in Northern Coastal California and its Application to Regional 305\(b\) Assessment](#)

Spatial Representation: The samples were collected from Santa Ysabel Creek.

Temporal Representation: The sample was collected in May 2008.

Environmental Conditions:

QAPP Information: Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and stored in the SWAMP database.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 51741, Benthic Community Effects

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID: 30955

Pollutant: Benthic Community Effects

LOE Subgroup: Adverse Biological Responses

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: One sample of IBI data was taken from May 2001 at one sampling site. The sample exceeded the IBI impairment threshold.

Data Reference: [Fish and Game IBI Data](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: The sample was collected at one site: 905SYCNTx on Santa Ysabel Creek.

Temporal Representation: Sampling occurred on May 22, 2001.

Environmental Conditions:

QAPP Information: Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.

QAPP Information Reference(s): [State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan](#)

DECISION ID 49344
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

Pollutant: Bifenthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49344, Bifenthrin
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76662

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49344, Bifenthrin

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76663
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

49376

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49376, Cadmium
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76629
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation: Data was collected on a single day 5/6/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49376, Cadmium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76664

Pollutant: Cadmium
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation: Data was collected on a single day 4/29/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49376, Cadmium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76628

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49376, Cadmium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76627
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al.

Guideline Reference: 2000).
[Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]

Temporal Representation: Data was collected on a single day 4/29/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49376, Cadmium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76630

Pollutant: Cadmium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 49421

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant: Chloride
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The samples do not exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceeded the beneficial use guidelines. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49421, Chloride
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76632
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49421, Chloride**Region 9****Santa Ysabel Creek (below Sutherland Reservoir)**

LOE ID:	76634
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49421, Chloride**Region 9****Santa Ysabel Creek (below Sutherland Reservoir)**

LOE ID:	76633
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49377	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49377, Chromium		Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

LOE ID:	76635
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49377, Chromium

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76636
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for

Guideline Reference:	sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49377, Chromium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76639
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49377, Chromium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76638
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Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49377, Chromium

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76637
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula

Objective/Criterion Reference: for the metals criterion.
[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	49379	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49379, Copper	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76641
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49379, Copper
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76642
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49379, Copper

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID: 76643

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49379, Copper

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID: 76644

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49379, Copper

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76640
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID

49345

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant: Cyfluthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49345, Cyfluthrin

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID: 76646

Pollutant: Cyfluthrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49345, Cyfluthrin

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76645
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49346
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49346, Cyhalothrin, Lambda
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76648

Pollutant: Cyhalothrin, Lambda
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49346, Cyhalothrin, Lambda
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76647
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **49347**
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49347, Cypermethrin Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76740
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

Guideline Reference:	average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012) Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49347, Cypermethrin
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76741
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49348

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49348, Deltamethrin
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76742

Pollutant: Deltamethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.

Guideline Reference: [OPP Pesticide Ecotoxicity Database.](#)

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was

Temporal Representation:	collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Environmental Conditions:	Data was collected on a single day 5/6/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed. Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49348, Deltamethrin
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76743
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49349

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one

sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49349, Esfenvalerate/Fenvalerate
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76748
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49349, Esfenvalerate/Fenvalerate

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76744
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49353	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49353, Fenpropathrin
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76750
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 49353, Fenpropathrin
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76749
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49381	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49381, Iron
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76753
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 49381, Iron
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76752
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49381, Iron
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76751
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49382, Lead

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID: 76756

Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.

Objective/Criterion Reference:	Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49382, Lead
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76757
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49382, Lead
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76754
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49382, Lead
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76755
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for

Guideline Reference:	sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000). Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49422	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. One of one sample exceeds for the aquatic life beneficial use and one of two samples exceeds the Municipal & Domestic Supply beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Only one of one or one of two samples exceeded the guideline or objective. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49422, Manganese	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76760
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49422, Manganese

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76761
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49422, Manganese
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76759

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Manganese.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]

Temporal Representation: Data was collected on a single day 5/6/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49422, Manganese
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76758

Pollutant: Manganese
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Manganese.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49380	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Five lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49380, Nickel	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76762
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Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49380, Nickel
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76765
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation: Data was collected on a single day 5/6/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49380, Nickel
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76763

Pollutant: Nickel
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation: Data was collected on a single day 4/29/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 49380, Nickel
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID: 76766

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49380, Nickel

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76764
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51995	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample for each LOE exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample for each LOEs exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 51995, Nitrate/Nitrite (Nitrite + Nitrate as N)		Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

LOE ID:	76768
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 samples exceed the water quality objective for Nitrate + Nitrite (as N). The Nitrate + Nitrite (as N) MCL objective is 10 mg/L.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (SDRWQCB 2011): Waters designated for MUN shall not contain concentrations of chemical constituents in excess of the MCL specified in Title 22 of the California Code of Regulations. The Nitrate + Nitrite (as N) MCL is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected at 905PS0026 (Santa Ysabel Creek).
Temporal Representation:	Samples collected on 5/13/2008.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51995, Nitrate/Nitrite (Nitrite + Nitrate as N)

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76767
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

51997

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant: Nitrogen, Nitrate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51997, Nitrogen, Nitrate

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID: 76769

Pollutant: Nitrogen, Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: 0 of 1 samples exceed the water quality objective for Nitrite (as N). The Nitrite (as N) MCL objective is 1 mg/L. The datum is reported as underneath the quantitation limit. This quantitation limit is less than or equal to the water quality standard, the value will be considered as meeting the water quality standard, objective, criterion, or evaluation guideline.

Data Reference: [Statewide Perennial Streams Assessment 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, San Diego Region (SDRWQCB 2011): Waters designated for MUN shall not contain concentrations of chemical constituents in excess of the MCL

Objective/Criterion Reference:	specified in Title 22 of the California Code of Regulations. The Nitrite (as N) MCL is 1 mg/L. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected at 905PS0026 (Santa Ysabel Creek).
Temporal Representation:	Samples collected on 5/13/2008.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52000	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52000, Nitrogen, Nitrite	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76770
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49471	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		
Pollutant:	Oxygen, Dissolved	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 49471, Oxygen, Dissolved
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76771
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49471, Oxygen, Dissolved
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76772
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49471, Oxygen, Dissolved
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76773
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 sample of Dissolved Oxygen concentrations had no exceedence.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	From the Basin Plan: Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses or less than 6.0 mg/l in waters with designated COLD beneficial uses. The annual mean dissolved oxygen concentrations shall not be less than 7 mg/l more than 10% of the time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample was collected from the 905PS0026 station.
Temporal Representation:	One sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 49355
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the aquatic life guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49355, Permethrin, total
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID: 76775

Pollutant: Permethrin, total
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.

Guideline Reference: [Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.](#)

Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49355, Permethrin, total
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76774
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49423

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of one sample exceeds for the aquatic life beneficial use and zero of one sample exceeds the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Only one of one or zero of one samples exceeded the guideline or objective. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49423, Selenium
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76667
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

Line of Evidence (LOE) for Decision ID 49423, Selenium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76666
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49423, Selenium
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76665
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49424	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the guideline or objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49424, Silver	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76668
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49424, Silver
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76669
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49424, Silver
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76670
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49487

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Specific Conductivity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of one samples exceed the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49487, Specific Conductivity
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76676
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. zero of one samples exceed the objectives.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49489, Sulfates	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	
LOE ID:	76677
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that

Objective/Criterion Reference:	adversely affect beneficial uses. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49489, Sulfates

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76678
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49489, Sulfates

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76679
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49491	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. zero of one samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49491, Temperature, water
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76680
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49493

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One of one samples exceed the objectives.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one samples exceeded the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49493, Total Dissolved Solids
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76681
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49493, Total Dissolved Solids

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76688
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49493, Total Dissolved Solids**Region 9****Santa Ysabel Creek (below Sutherland Reservoir)**

LOE ID:	76687
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists

Objective/Criterion Reference:	objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Santa Ysabel Creek (below Sutherland Reservoir) within the San Dieguito Hydrologic Unit is 500 mg/L. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51756	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51756, Toxicity	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76689
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 905S01953.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	49496	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum
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of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49496, Turbidity
 Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76690
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 1 exceed the water quality objective.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Region (SDRWQCB 2011): Table 3-2 states that the Turbidity for Santa Ysabel is 20 (NTU). Concentrations not to be exceeded more than 10% of the time during any one year period.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at 905PS0026 (Santa Ysabel Creek).
Temporal Representation:	Samples were collected on 5/13/2008.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49425

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The one

sample did not exceed the guideline or objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49425, Zinc
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76698
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 49425, Zinc
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	76699
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49425, Zinc
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76691
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be

Objective/Criterion Reference:	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49425, Zinc	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76700
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 5/6/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49425, Zinc	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)	

LOE ID:	76692
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Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	49481	Region 9
Santa Ysabel Creek (below Sutherland Reservoir)		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. zero of one samples exceed the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum
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of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49481, pH

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76776
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49481, pH

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	76777
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Ysabel Creek (below Sutherland Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ysabel Creek (below Sutherland Reservoir) was collected at 1 monitoring site [Santa Ysabel Creek below Clevenger Cyn. Cr. - 905S01953]
Temporal Representation:	Data was collected on a single day 4/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49481, pH
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

LOE ID:	76778
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 sample collected had no exceedences.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters[,] the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the 905PS0026 station.
Temporal Representation:	One sample was collected in May 2008
Environmental Conditions:	
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

DECISION ID **34084**
Santa Ysabel Creek (below Sutherland Reservoir)

Region 9

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Original
Pollution

Regional Board Conclusion:

The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.9 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 129 samples exceed the Basin Plan water quality objective for polycyclic aromatic hydrocarbons.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 129 samples exceed the Basin Plan water quality objective for polycyclic aromatic hydrocarbons and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 34084, PAHs (Polycyclic Aromatic Hydrocarbons)
Santa Ysabel Creek (below Sutherland Reservoir)**

Region 9

LOE ID:	30955
Pollutant:	Benthic Community Effects
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample of IBI data was taken from May 2001 at one sampling site. The sample exceeded the IBI impairment threshold.
Data Reference:	Fish and Game IBI Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. (SDRWQCB, 1995)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60- 79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected at one site: 905SYCNTx on Santa Ysabel Creek.
Temporal Representation:	Sampling occurred on May 22, 2001.
Environmental Conditions:	
QAPP Information:	Quality Control for collection and identification was conducted in accordance with the Quality Assurance Project Plan for the California Stream Bioassessment Procedure and the State of California, California Monitoring an Assessment Program: "CMAP", Quality Assurance Project Plan.
QAPP Information Reference(s):	State of California, California Monitoring and Assessment Program: "CMAP". Quality Assurance Project Plan for the California Stream Bioassessment Procedure The San Diego Stream Team Quality Assurance Project Plan

Line of Evidence (LOE) for Decision ID 34084, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Santa Ysabel Creek (below Sutherland Reservoir)

LOE ID:	30953
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	129
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	129 samples were collected at Santa Ysabel Creek station 901SJBEL2 during the months of January 2003, April 2003, and May 2003 for Polycyclic Aromatic Hydrocarbons (PAHs) analyses, none of the 129 samples exceeded evaluation concentrations (SWAMP, 2007).
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCL 0.0002mg/l) specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Santa Ysabel Creek station 901SJBEL2; (Latitude 33.0862, Longitude -116.9166). (Station name incorrect. Coordinates show 905YSA7.)
Temporal Representation:	Samples were collected during the months of January 2003, April 2003, and May 2003.
Environmental Conditions:	
QAPP Information:	Quality controls for chemical analyses were conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sweetwater River, Upper \(above Sweetwater Reservoir\)](#)
Water Body ID: CAR9092100020091030151520
Water Body Type: River & Stream

DECISION ID	51176	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: 1,2,3-Trichloropropane
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51176, 1,2,3-Trichloropropane	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 77047
Pollutant: 1,2,3-Trichloropropane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved, the reporting limit for the non-detected sample is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The public health goal for 1,2,3-Trichloropropane is 0.0007 ug/L.
Guideline Reference:	Public Health Goal for 1,2,3-Trichloropropane in Drinking Water
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51188	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	2,4,5-TP (Silvex)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one samples exceeded the criterion or guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criterion or guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51188, 2,4,5-TP (Silvex)

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	77048
Pollutant:	2,4,5-TP (Silvex)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for 2,4,5-TP, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	USEPA National Recomm. WQ Criteria, water + fish consump. in drinking water is 10 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir)
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID

51189

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant:	2,4-D (2,4-Dichlorophenoxy acetic acid)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51189, 2,4-D (2,4-Dichlorophenoxy acetic acid)
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77049
Pollutant:	2,4-D (2,4-Dichlorophenoxy acetic acid)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for 2,4-D, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation byreference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California primary MCL in drinking water is 70 ug/L.
Guideline Reference:	
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir)
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51190	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Alachlor
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51190, Alachlor	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77063
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for alachlor, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels

specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The California primary MCL for alachlor in drinking water is 2 ug/L.

Guideline Reference:

Spatial Representation:

The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation:

The sample was collected on January 15th 2007.

Environmental Conditions:

No environmental conditions were reported.

QAPP Information:

Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	51296	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Aldrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeds the municipal and domestic criterion. Zero of the zero sample exceeds the warm freshwater criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of the one sample exceeds the municipal and domestic criterion. Zero of the zero sample exceeds the warm freshwater criterion. The sample size for the municipal beneficial use is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. The samples for the warm freshwater beneficial use were not used in the assessment due to reporting limits that were higher than the guideline.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 51296, Aldrin	Region 9
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Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	77066
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Calif. Toxic Rule (USEPA) for other waters for aldrin is 0.00014 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51296, Aldrin**Region 9****Sweetwater River, Upper (above Sweetwater Reservoir)**

LOE ID:	77065
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms..
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Calif. Toxic Rule for sources of drinking water for aldrin is 0.00013 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	53388	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Ammonia
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53388, Ammonia	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77082
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River @ Old Bridge]
Temporal Representation:	Data was collected on a single day 6/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52188	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of two samples exceeded guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52188, Antimony
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77083
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the two detected results exceeded the MCL. The reporting limits for eleven non-detect samples were greater than the MCL, therefore these data could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for antimony is 6 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	



DECISION ID	52204	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant for aquatic life. Zero of the fifteen samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of fifteen samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52204, Arsenic	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77085
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52204, Arsenic	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77099
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Zero of eight samples exceed the objective for MUN.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	From the Basin Plan: For all waters with a municipal beneficial use, the WQO for Arsenic is 0.05 mg/L.
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52204, Arsenic	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77098
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for Arsenic exceeded the CTR criteria of 0.15 mg/L.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule lists criterion continuous concentrations (expressed as a 4-day average) for arsenic to protect aquatic life in freshwater. The CTR criteria for arsenic is 0.15 mg/L. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 52204, Arsenic
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77084
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.

Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	51191	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Atrazine
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51191, Atrazine	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77100
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Atrazine, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California primary MCL is 1.0 ug/L for drinking water.
Guideline Reference:	
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	52196	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 13 samples exceeded guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52196, Barium
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77101
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the thirteen samples exceeded the MCL.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for barium is 1,000 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

**DECISION ID 51192
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51192, Benzo(a)pyrene (3,4-Benzopyrene -7-d)
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76860
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for sources of drinking water for Benzo(a)pyrene is

Guideline Reference: 0.0044 ug/L.
[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: The sample was collected on January 15th 2007.

Environmental Conditions: No environmental conditions were reported.

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	52202	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: Beryllium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the beneficial use guideline for Municipal and Domestic use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the beneficial use guideline for Municipal and Domestic use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52202, Beryllium	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 76861

Pollutant: Beryllium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the thirteen samples exceeded the MCL.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for beryllium is 4 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51180	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51180, Bifenthrin
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	78147
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 51193

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant:	Bromacil
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 51193, Bromacil
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76882
Pollutant:	Bromacil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Bromacil, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological response in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA, OPP Drinking Water Health Advisory - non cancer, is 70 ug/L for drinking water.
Guideline Reference:	
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical &

QAPP Information Reference(s):

DECISION ID	52205	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of nine, zero of one, and zero of 13 samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the 10 and zero of 14 samples exceed the beneficial use guideline for Warm Freshwater Habitat use. Samples are not combined for each beneficial use since the fraction is different for each LOE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of nine, zero of one, and zero of 13 samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the 10 and zero of 14 samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52205, Cadmium	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 76884
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 9
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52205, Cadmium
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76909
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The detection limits for the thirteen non-detect samples were less than the objective value and therefore are meeting the objective.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Total cadmium levels should not exceed the California Department of Public Health Primary MCL of 5 ug/L.
Guideline Reference:	
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier

Environmental Conditions:	biannually during the months of January and June/July.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52205, Cadmium	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	76907
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52205, Cadmium	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	76883
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52205, Cadmium
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76908
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for Cadmium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52205, Cadmium
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76885
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 1 of 0 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant: Carbaryl
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51369, Carbaryl

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID: 76910

Pollutant: Carbaryl
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: The sample did not exceed the water quality objective for carbaryl, thought to be protective of freshwater aquatic life.

Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The National Recommended WQ Criteria, 4-day average, is 2.1 ug/L for freshwater aquatic life.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51307	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the municipal and domestic guideline. Zero of the zero sample exceeds the warm freshwater guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the municipal and domestic guideline. Zero of the zero sample exceeds the warm freshwater guideline. The sample size for the municipal beneficial use is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. The samples for the warm freshwater beneficial use were not used in the assessment due to reporting limits that were higher than the guideline. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51307, Chlorpyrifos	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	78154
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Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Steele Canyon Road, Sweetwater River @ Old Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51307, Chlorpyrifos
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76924
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Steele Canyon Road, Sweetwater River @ Old Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 52214 Region 9	
Sweetwater River, Upper (above Sweetwater Reservoir)	
Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Six lines of evidence are available in the administrative record to assess this pollutant. Zero of 13 samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the 1 and zero of 14 samples exceed the beneficial use guideline for Warm Freshwater Habitat use. Samples are not combined for for warm Freshwater since the fraction is different for each LOE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the 1 and zero of 14 samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52214, Chromium
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76939
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the thirteen samples exceeded the MCL.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for chromium, total is 50 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir)
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52214, Chromium
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76925
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for

Data Reference:	Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52214, Chromium

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	76938
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for Chromium exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116

57°1.71'W and from Sweetwater River Influent at approximately 32°42'14.97"N / -116°57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation:

A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.

Environmental Conditions:

QAPP Information:

Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	52215	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the beneficial use guideline for Municipal and Domestic use. One of the eight samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The samples for the two beneficial uses cannot be combined since the fractions for the LOEs are not the same.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the ten samples exceed the beneficial use guideline for Municipal and Domestic use. One of the eight samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52215, Copper	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	76940
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52215, Copper
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76941
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of

Objective/Criterion Reference:	Regulations). Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52215, Copper
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76942
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52215, Copper

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	76954
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52215, Copper**Region 9****Sweetwater River, Upper (above Sweetwater Reservoir)**

LOE ID:	76955
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of the fourteen samples tested for Copper exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36

Objective/Criterion Reference:	(section 131.36 revised at 57 FR 60848, December 22, 1992). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	52197	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Cyanide
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 13 samples exceeded guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 13 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52197, Cyanide	Region 9
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Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	76956
Pollutant:	Cyanide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All thirteen samples were reported as non-detect. The reporting limits were larger than the criteria of 5.2 ug/L used to assess water quality.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule lists criterion continuous concentrations (expressed as a 4-day average) for cyanide to protect aquatic life in freshwater. The criteria for cyanide is 5.2 ug/L
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51182	Region 9
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Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51182, Cypermethrin
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	78160
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

DECISION ID	51183	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: DDD (Dichlorodiphenyldichloroethane)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero sample exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero sample exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51183, DDD (Dichlorodiphenyldichloroethane)	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 76970

Pollutant: DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.

Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 4,4'-DDD criterion for the protection of human health from the consumption of water and organisms is 0.00031 ug/L (USEPA Nationally Recommended Criteria, 2006).
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51184	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero sample exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero sample exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51184, DDE (Dichlorodiphenyldichloroethylene)	Region 9
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Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	76971
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The 4,4'-DDE criterion for the protection of human health from the consumption of water and organisms is 0.00022 ug/L (USEPA Nationally Recommended Criteria, 2006).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir)
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID 51185 **Region 9****Sweetwater River, Upper (above Sweetwater Reservoir)**

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero sample exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero sample exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51185, DDT (Dichlorodiphenyltrichloroethane)
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	76972
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Calif. Toxics Rule for other waters is 0.00059 ug/L for DDT for freshwater aquatic life.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51194	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Dalapon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51194, Dalapon	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	76969
Pollutant:	Dalapon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Dalapon, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels

specified in California Code of Regulations, Title 22, Table 64444-A of section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-5).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

The California primary MCL is 200 ug/L for drinking water.

Guideline Reference:

Spatial Representation:

The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation:

The sample was collected on January 15th 2007.

Environmental Conditions:

No environmental conditions were reported.

QAPP Information:

Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	53381	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53381, Diazinon	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 78166

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Steele Canyon Road, Sweetwater River @ Old Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53381, Diazinon
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76980
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

Objective/Criterion Reference:	sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Steele Canyon Road, Sweetwater River @ Old Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53381, Diazinon
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76981
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective of 0.1 ug/L for Diazinon, thought to be protective of freshwater aquatic life.
Data Reference:	Data for Various Pollutants in Sweetwater Authority. 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Dept. of Fish & Game WQ Criteria, 4-day average, for diazinon is 0.1 ug/L for freshwater aquatic life.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51372	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Dicamba
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51372, Dicamba	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	76982
Pollutant:	Dicamba
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Dicamba, thought to be protective of drinking water..
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA, OPP Drinking Water Health Advisory-non-cancer, is 4000 ug/L for drinking water.

Guideline Reference:

Spatial Representation: The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: The sample was collected on January 15th 2007.

Environmental Conditions: No environmental conditions were reported.

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	51325	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: Dieldrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51325, Dieldrin	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 76983

Pollutant: Dieldrin

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for sources of drinking water is 0.00014 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51325, Dieldrin
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76991
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Dieldrin, thought to be protective of freshwater aquatic life.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for dieldrin is 0.056 ug/L for protection of freshwater aquatic life.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Spatial Representation: The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: The sample was collected on January 15th 2007.

Environmental Conditions: No environmental conditions were reported.

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	51195	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: Dinoseb

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51195, Dinoseb	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 76992

Pollutant: Dinoseb

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Dinoseb, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California primary MCL for Dinoseb is 7 ug/L for drinking water.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51196	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Dioxin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51196, Dioxin
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76993
Pollutant:	Dioxin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved, the reporting limit for the non-detected sample is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxic Rule for 2,3,7,8-TCDD (Dioxin) is 0.013 pg/L for sources of drinking water.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID 51197
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

Pollutant:	Diuron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51197, Diuron
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	76994
Pollutant:	Diuron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Diuron, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA, Health Advisory, as a drinking water level is 2 ug/L. This constituent is likely a carcinogen and so the risk level is one in a million.
Guideline Reference:	2012 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID 51198

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51198, Endrin
Sweetwater River, Upper (above Sweetwater Reservoir)****Region 9**

LOE ID:	77005
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the samples exceeded the criterion.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA), 4-day average total, is 0.76 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Spatial Representation: The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: The sample was collected on January 15th 2007.

Environmental Conditions: No environmental conditions were reported.

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	51336	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: Heptachlor

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeds the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51336, Heptachlor	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 77016

Pollutant: Heptachlor

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for Heptachlor is 0.0038ug/L for protection of freshwater habitat.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51336, Heptachlor
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77008
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for Heptachlor for sources of drinking water is 0.00021 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	52982	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 14 samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 14 samples did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52982, Iron	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77017
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0

Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for iron exceeded the numeric criteria of 1 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. The numeric criteria for iron is 1 mg/L Ref16
Guideline Reference:	National recommended water quality criteria: 2002. EPA-822-R-02-047 Washington, D.C. USEPA
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	52986	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant for aquatic life. Zero of the twenty-four samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of twenty-four samples exceeded the CRITERIA and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 52986, Lead
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77034
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	7 samples were collected at Low Flow Barrier and 7 samples were collected at Sweetwater River Influent.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Maximum Contaminant Level for lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 52986, Lead
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77019
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52986, Lead

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	77018
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52986, Lead
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77033
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One of fourteen samples tested for Lead exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52986, Lead
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77020
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 51340		Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51340, Malathion
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77035
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Steele Canyon Road, Sweetwater River @ Old Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 51340, Malathion
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	78175
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Steele Canyon Road, Sweetwater River @ Old Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52201	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the 14 samples exceed the beneficial use guideline for Warm Freshwater Habitat use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the zero samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the 14 samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52201, Mercury
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77051
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The reporting limits for the thirteen non-detect samples were greater than the criteria, therefore these data could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule criteria to protect human health exposure to elemental mercury is 0.05 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52201, Mercury

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	77050
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for mercury exceeded the numeric criteria of 0.77 ug/L, promulgated to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect freshwater aquatic organisms from chronic exposures and are expressed as 4-day average concentrations. Criterion derived from data for inorganic mercury (II), but is applied to total mercury. It will probably be underprotective if a substantial portion of mercury in the water column is methylmercury. Derivation of criterion did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels. The numeric criteria for mercury is 0.77 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	53165	Region 9
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Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53165, Nickel
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77069
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the fourteen samples tested for Nickel exceeded the hardness adjusted CTR criteria.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.

Environmental Conditions:

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 53165, Nickel
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 77068

Pollutant: Nickel
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]

Temporal Representation: Data was collected on a single day 6/9/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID 53385
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

Pollutant: Nitrogen, Nitrate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final: New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53385, Nitrogen, Nitrate
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID: 77072

Pollutant: Nitrogen, Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Six samples were collected with no samples detecting nitrite as N. However, it cannot be determined whether the reporting limit was below the water quality objective and therefore whether samples met the water quality objective.

Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: San Diego Region Basin Plan: Water designated for use as MUN shall not contain concentrations of inorganic chemicals in excess of the MCL set in the California Code of Regulations. The California MCL for nitrite as N is 1 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Low Flow Barrier On Sweetwater River.

Temporal Representation:	Samples were collected biannually from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	Data was submitted with an unsigned water quality monitoring plan.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 53385, Nitrogen, Nitrate
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77071
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 53385, Nitrogen, Nitrate
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77070
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of six samples exceed the objective for nitrate (as N) at 10 mg/L. 4 of 6 samples are

reported as non-detects. These non-detects are less than or equal to the water quality standard, the value will be considered as meeting the water quality standard, objective, criterion, or evaluation guideline.

Data Reference:

[Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

The Water Quality Control Plan, San Diego Basin: Waters designated for MUN shall not contain concentrations of chemical constituents in excess of the MCL specified in Title 22 of the California Code of Regulations. The nitrate (as N) MCL is 10 mg/L.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at Low Flow Barrier On Sweetwater River.

Temporal Representation:

Samples were collected biannually from 2007 to 2009.

Environmental Conditions:

QAPP Information:

Data was submitted with an unsigned water quality monitoring plan.

QAPP Information Reference(s):

DECISION ID	53386	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53386, Nitrogen, Nitrite	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77086
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]
Temporal Representation:	Data was collected on a single day 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 53386, Nitrogen, Nitrite
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77087
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River @ Old Bridge]

Temporal Representation: Data was collected over the time period 6/11/2003-6/12/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	51187	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: PCBs (Polychlorinated biphenyls)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero sample exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero sample exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51187, PCBs (Polychlorinated biphenyls)	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 77088

Pollutant: PCBs (Polychlorinated biphenyls)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for PCBs is 0.014 ug/L for protection of freshwater aquatic habitat.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51199	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Pentachlorophenol (PCP)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51199, Pentachlorophenol (PCP)
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77089
Pollutant:	Pentachlorophenol (PCP)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Pentachlorophenol. The PH collected on 01/23/07 was 7.91.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA), 4-day average at pH 7.8, is 15 ug/L for pentachlorophenol for freshwater aquatic life.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The samples were collected between Jan. 15, 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID 52198

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 14 samples exceeded guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 14 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 52198, Silver
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77102
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All fourteen samples were reported as non-detect. The reporting limits were larger than the criteria used to assess water quality.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116

57°36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River

Environmental Conditions:

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	51353	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: Temperature, water

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of eleven samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of eleven samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51353, Temperature, water	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 77103

Pollutant: Temperature, water

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 11

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of the 11 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129). Since there is no evaluation guideline for assessing temperature for the warm freshwater aquatic life beneficial use, this line of evidence will not be used for Listing Decisions in the 2012 Integrated Report and will be retired for said Listing cycle.
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA. Davis
Spatial Representation:	Samples were collected at the following station: SWT-030-SR 94 East
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

DECISION ID 52199 Region 9	
Sweetwater River, Upper (above Sweetwater Reservoir)	
Pollutant:	Thallium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 12 samples exceeded guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 12 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52199, Thallium
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77104
Pollutant:	Thallium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the twelve samples exceeded the MCL. The reporting limits for one of the non-detect samples was greater than the MCL, therefore this data could not be used in this assessment.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The CA Department of Health Services maximum contamination level (MCL) thought to be protective of drinking water for thallium is 2 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir)
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

**DECISION ID 51186
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero sample exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero sample exceeded the guideline. The sample was not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51186, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID: 76863

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met. The 4,4' DDT criterion is applicable to Total DDT. Total DDT is the sum of 4,4'- and 2,4'-isomers of DDT, DDE, and DDD.

Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The Calif. Toxics Rule for other waters is 0.001 ug/L for DDT for freshwater aquatic life.
Guideline Reference:	
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	51349	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Toxaphene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeds the beneficial use criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sample exceeded the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51349, Toxaphene	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	76864
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA), 4-day average, total, is 0.0002 ug/L for freshwater aquatic life.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51349, Toxaphene
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76865
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for sources of drinking water is 0.00073 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	43752	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
 Regional Board Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the five samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the five samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
 Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 43752, Toxicity		Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

LOE ID:	30898
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
 Beneficial Use:	 Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1

Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Toxicity was observed in the following data from the Storm Water Ambient Monitoring Program
	Selenastrum capricornutum- None of four samples showed significant toxicity levels.
	Ceriodaphnia dubia; One of four samples were toxic.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected from the monitoring station Sweetwater River 3 on the main stem of the Sweetwater River.
Temporal Representation:	Samples were taken between June and September 2005 and January and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43752, Toxicity
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76867
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically and biologically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation:

The samples were collected from site 909_SMC00282, Sweetwater River, upper.

Temporal Representation:

The samples were collected in June 2009.

Environmental Conditions:

QAPP Information:

This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.

QAPP Information Reference(s):

[e-mail clarifying QAPP information](#)

DECISION ID	51200	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Trifluralin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample does not exceed the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the evaluation guideline, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51200, Trifluralin	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	76887
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Trifluralin, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA IRIS cancer risk level is 5 ug/L for drinking water.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	53174	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53174, Zinc
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 76891

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the fourteen samples tested for Zinc exceeded the hardness adjusted CTR criteria.
Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. ref2557

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.

Environmental Conditions:
QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 53174, Zinc
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 76888

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53174, Zinc

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	76889
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]

Temporal Representation: Data was collected 6/11/2003 - 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53174, Zinc
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 76890

Pollutant: Zinc

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, upper - 909_SMC00282]

Temporal Representation: Data was collected on a single day 6/9/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID 53382
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

Pollutant:	alpha.-BHC (Benzenehexachloride or alpha-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53382, alpha.-BHC (Benzenehexachloride or alpha-HCH)	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	77067
Pollutant:	alpha.-BHC (Benzenehexachloride or alpha-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The Calif. Toxics Rule (USEPA) for sources of drinking water for alpha-BHC is 0.0039 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	53383	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	beta-BHC (Benzenehexachloride or beta-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53383, beta-BHC (Benzenehexachloride or beta-HCH)		Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

LOE ID:	76862
Pollutant:	beta-BHC (Benzenehexachloride or beta-HCH)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for sources of drinking water is 0.014 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	52187	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Aluminum
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Seven of the 14 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Seven of 14 samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 52187, Aluminum
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77081
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Seven of fourteen samples tested for aluminum exceeded the numeric criteria of 0.087 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect aquatic organisms from chronic exposures (expressed as 4-day average concentration) in freshwater. The numeric criteria o or aluminum is 0.087 mg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

**DECISION ID 51753
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

Pollutant: Benthic Community Effects

Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Hydromodification Resource Extraction Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77081
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	Seven of fourteen samples tested for aluminum exceeded the numeric criteria of 0.087 mg/L to protect warm freshwater habitat.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	National Recommended Water Quality Criteria Continuous Concentrations are intended protect aquatic organisms from chronic exposures (expressed as 4-day average concentration) in freshwater. The numeric criteria o or aluminum is 0.087 mg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	72768
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Nine of the nine samples collected had IBI scores below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at stations SR-94 and SR-TWAS-1 Sweetwater River.
Temporal Representation:	The samples were collected twice a year in May and October from 2002 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring

QAPP Information Reference(s): [Program Bioassessment Quality Assurance Project Plan, June 25, 2009.](#)
[Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.](#)

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 76859

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: The one sample collected had an IBI score above 40. The score was 52.9. SMC bioassessment
Data Reference: [Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:

Spatial Representation: The sample was collected at 909_SMC00282, Sweetwater River, upper.
Temporal Representation: The sample was collected in June 2009.
Environmental Conditions:
QAPP Information: The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 30893

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the four samples collected at Sweetwater River exceed the water quality objective of 5 Åµg/L for dissolved selenium according to results in California Surface Water Ambient Monitoring Program Report, 2007. Samples for Sweetwater River were collected in June 2005, September 2005, January 2006, and April 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Sweetwater River stations 909SSWR03.
Temporal Representation:	Samples for Sweetwater River were collected in May 2005, September 2005, January 2006, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	79676
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	A total of nine samples were taken at one station on the Sweetwater River. Four of the nine samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. One sample was not scored due to low organism counts
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program. 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in

a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference: [The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation: The samples were collected at station SR-94 (SR-TWAS-1 is co-located)

Temporal Representation: The samples were collected from 2002 to 2009.

Environmental Conditions:

QAPP Information: The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.

QAPP Information Reference(s): [Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.](#)
[Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.](#)

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID: 77090

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 13
Number of Exceedances: 7

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: Seven of the thirteen samples tested for Selenium exceeded the CTR criteria of 0.005 mg/L.
Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The CTR criteria for selenium is 0.005 mg/L. ref2557

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.

Environmental Conditions:

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical &

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	79675
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was collected from one station. The CSCI score was above the 0.79 threshold, and therefore the site is not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The sample was collected at 909_SMC00282, Sweetwater River, upper.
Temporal Representation:	The sample was collected in June 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

Line of Evidence (LOE) for Decision ID 51753, Benthic Community Effects

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

LOE ID:	30896
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of the four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on June 1 and September 7, 2005, January 31 and April 11, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected from the monitoring station Sweetwater River 3 (station id: 909SSWR03 lat/long: 32.97877/-117.23506), located on the main stem of the Sweetwater River.
Temporal Representation:	Samples were collected on June 1 and September 7, 2005, January 31 and April 11, 2006.
Environmental Conditions:	The above sampling events occurred during dry weather declining base flow, dry weather minimum base flow, wet weather between storm events, and wet weather high base flow, respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

DECISION ID	51729	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 8 of 11 single samples exceed the water quality objective for enterococcus of 61/100ml for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Data from 2003 to 2009 show that 8 of 11 single samples exceed the water quality objective for enterococcus of 61/100ml for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51729, Indicator Bacteria		Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		
LOE ID:	77006	
Pollutant:	Enterococcus	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	11	
Number of Exceedances:	8	
Data and Information Type:	PATHOGEN MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 8 of 11 samples exceed the criterion for Enterococci.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:		
Guideline Reference:		
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]	
Temporal Representation:	Data was collected over the time period 6/11/2003-6/3/2009.	
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.	

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51729, Indicator Bacteria
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 77007

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 11
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]

Temporal Representation: Data was collected over the time period 6/11/2003-6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51729, Indicator Bacteria
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID: 77105

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 11
Number of Exceedances: 4

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Upper (above Sweetwater Reservoir) to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Upper (above Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Old Bridge, Sweetwater River @ Steele Canyon Road]
Temporal Representation:	Data was collected over the time period 6/11/2003-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	44381	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Selenium
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Eight of the 17 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 17 samples exceed the criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 44381, Selenium
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	30893
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the four samples collected at Sweetwater River exceed the water quality objective of 5 Åµg/L for dissolved selenium according to results in California Surface Water Ambient Monitoring Program Report, 2007. Samples for Sweetwater River were collected in June 2005, September 2005, January 2006, and April 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California: Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Sweetwater River stations 909SSWR03.
Temporal Representation:	Samples for Sweetwater River were collected in May 2005, September 2005, January 2006, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 44381, Selenium
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	77090
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)

Data Used to Assess Water Quality:	Seven of the thirteen samples tested for Selenium exceeded the CTR criteria of 0.005 mg/L.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The CTR criteria for selenium is 0.005 mg/L. ref2557
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Spatial Representation:	Samples were collected from Low Flow Barrier at approximately 32 43'11.12"N /-116 57'1.71"W and from Sweetwater River Influent at approximately 32 42'14.97"N / -116 57'36.85"W. Both sample sites are part of Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	A sample was collected from Sweetwater River Influent in June of 2006. From 2007-2009, samples were collected from both Sweetwater River Influent and Low Flow Barrier biannually during the months of January and June/July.
Environmental Conditions:	
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID	43750	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Total Nitrogen as N
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Two of four samples exceed the water quality objective for stimulatory substances.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of four samples exceed the water quality objective for stimulatory substances and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 43750, Total Nitrogen as N
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	30896
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Two of the four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on June 1 and September 7, 2005, January 31 and April 11, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	<p>Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)</p> <p>A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)</p>
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected from the monitoring station Sweetwater River 3 (station id: 909SSWR03 lat/long: 32.97877/-117.23506), located on the main stem of the Sweetwater River.
Temporal Representation:	Samples were collected on June 1 and September 7, 2005, January 31 and April 11, 2006.
Environmental Conditions:	The above sampling events occurred during dry weather declining base flow, dry weather minimum base flow, wet weather between storm events, and wet weather high base flow, respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game. Monterey, CA

**DECISION ID 51305
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

Pollutant: Chlordane

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)

New Decision

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the criterion. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51305, Chlordane
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID: 76922

Pollutant: Chlordane
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality: This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.

Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The California Toxics Rule (USEPA) for sources of drinking water is 0.00057 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51305, Chlordane
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	76923
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Toxics Rule (USEPA) for other waters is 0.00059 ug/L for freshwater aquatic life.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID 51329
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeded the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51329, Endosulfan
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77003
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Toxics Rule (USEPA), 4-day average, total, is 0.036 ug/L for Endosulfan.

Guideline Reference: [Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants: States' Compliances](#)

Spatial Representation: The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: The sample was collected on January 15th 2007.

Environmental Conditions: No environmental conditions were reported.

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51329, Endosulfan	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID: 76995

Pollutant: Endosulfan

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: The sample did not exceed the water quality objective for Endosulfan, thought to be protective of drinking water.

Data Reference: [Data for Various Pollutants in Sweetwater Authority, 2000-2010.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Toxics Rule for sources of drinking water is 110 ug/L for Endosulfan.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation: The sample was collected on January 15th 2007.

Environmental Conditions: No environmental conditions were reported.

QAPP Information: Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.

QAPP Information Reference(s):

DECISION ID	51344	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant: Methoxychlor

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Original
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceeds the municipal and domestic objective. Zero of the zero sample exceeds the warm freshwater criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one sample exceeds the municipal and domestic criterion. Zero of the zero sample exceeds the warm freshwater criterion. The sample size for the municipal beneficial use is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. The samples for the warm freshwater beneficial use were not used in the assessment due to reporting limits that were higher than the guideline.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

Line of Evidence (LOE) for Decision ID 51344, Methoxychlor
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77052
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	The sample did not exceed the water quality objective for Methoxychlor, thought to be protective of drinking water.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California primary MCL for methoxychlor is 30 ug/L for drinking water.
Guideline Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).

Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51344, Methoxychlor
Sweetwater River, Upper (above Sweetwater Reservoir)

Region 9

LOE ID:	77053
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	This data is not of sufficient resolution to determine if standards are being achieved: the detection limit is greater than the criteria used to determine if water quality standards are being met.
Data Reference:	Data for Various Pollutants in Sweetwater Authority, 2000-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	National Recommended Water Quality Criteria for methoxychlor is 0.03 ug/L for protection of freshwater habitat.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	The sample was collected from Low Flow Barrier at Sweetwater River, Upper (above Sweetwater Reservoir).
Temporal Representation:	The sample was collected on January 15th 2007.
Environmental Conditions:	No environmental conditions were reported.
QAPP Information:	Samples were collected for as part of California Department of Health Services (CADHS) Inorganic Chemicals / Title 22 Primary Inorganic Standards and CADHS General Physical & Minerals / Title 22 Secondary Inorganic Standards because of the water is a source of drinking water.
QAPP Information Reference(s):	

DECISION ID 44401

Region 9

Sweetwater River, Upper (above Sweetwater Reservoir)

Pollutant:	Phosphorus
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. None of the four samples exceed the water quality objective for phosphorus.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of four samples exceeded the total phosphorus water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.</p>

**Line of Evidence (LOE) for Decision ID 44401, Phosphorus
Sweetwater River, Upper (above Sweetwater Reservoir)**

Region 9

LOE ID:	30890
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of the four samples collected exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Samples were collected on June 1, 2005, September 7, 2005, January 31, 2006 and April 11, 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin

Spatial Representation:	Samples were collected from the monitoring station Sweetwater River 3 (station id: 909SSWR03 lat/long: 32.97877/-117.23506), located on the main stem of the Sweetwater River.
Temporal Representation:	Samples were collected on June 1, 2005, September 7, 2005, January 31, 2006 and April 11, 2006.
Environmental Conditions:	The above sampling events occurred during dry weather declining base flow, dry weather minimum base flow, wet weather between storm events, and wet weather high base flow, respectively.
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	44189	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 one line of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of four samples exceeded the sulfate water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44189, Sulfates	Region 9
Sweetwater River, Upper (above Sweetwater Reservoir)	

LOE ID:	30887
Pollutant:	Sulfates
LOE Subgroup:	Pollution
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of four samples collected in Sweetwater River show excessive sulfate concentrations according to results in California Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in September 2005, June 2005, February 2006, and April 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Sweetwater River Stations 909SSWR03.
Temporal Representation:	Samples were collected in September 2005, June 2005, February 2006, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sweetwater River, Lower \(below Sweetwater Reservoir\)](#)
Water Body ID: CAR9091200020091030145725
Water Body Type: River & Stream

DECISION ID	44311	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2021
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant.

Enterococcus

28 of 32 samples exceed the single sample objective for water contact recreation.

Fecal coliform

18 of 32 samples exceed the single sample objective for water contact recreation.

Total coliform

9 of 17 samples exceed the single sample objective for water contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Samples and exceedences are as follows:

Enterococcus

28 of 32 samples exceed the single sample objective for water contact recreation.

Fecal coliform

18 of 32 samples exceed the single sample objective for water contact recreation.

Total coliform

9 of 17 samples exceed the single sample objective for water contact recreation.

The enterococcus, fecal coliform, and total coliform samples exceed the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44311, Indicator Bacteria	Region 9
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Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	30901
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirteen of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, no more than 10% of the samples during any 30-day period for waters designated for contact recreation shall exceed 400 per 100 ml. From the Basin Plan, no more than 10% of the samples for waters designated for contact recreation shall exceed 400 per 100 ml (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44311, Indicator Bacteria**Region 9****Sweetwater River, Lower (below Sweetwater Reservoir)**

LOE ID:	77026
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 5 of 17 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road and Sweetwater River @ Willow Road,]
Temporal Representation:	Data was collected over the time period 6/19/2003-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 44311, Indicator Bacteria
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77024
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 13 of 17 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road and Sweetwater River @ Willow Road,]
Temporal Representation:	Data was collected over the time period 6/19/2003-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 44311, Indicator Bacteria
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77096
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 9 of 17 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road and Sweetwater River @ Willow Road,]
Temporal Representation:	Data was collected over the time period 6/19/2003-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 44311, Indicator Bacteria

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	30900
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective for Enterococcus and thirteen of fifteen samples collected exceed the water quality objective for Fecal Coliform according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.

Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, the most stringent of the US EPA bacteriological criteria for enterococcus sets a maximum limit at 61 colonies per 100mL (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

DECISION ID	44310	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Selenium
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence for this cycle is available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 19 samples from this cycle exceeded the criteria, and this number of samples is insufficient to delist with the power and confidence of the Listing Policy. A minimum of 28 samples is needed to determine if a beneficial use is fully supported using table 4.1. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44310, Selenium	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID: 78180

Pollutant: Selenium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 19
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Selenium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]

Temporal Representation: Data was collected over the time period 2/17/2002-10/5/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 44310, Selenium
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID: 30892

Pollutant: Selenium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
 Number of Exceedances: 4

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)
 Data Used to Assess Water Quality: Four of the four samples collected at Sweetwater River exceed the water quality objective of 5 µg/L for dissolved selenium according to results in California Surface Water Ambient Monitoring Program Report, 2007. Samples for Sweetwater River were collected in May 2005, September 2005, January 2006, and April 2006.

Data Reference: [Monitoring data for Region 9](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000). Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline: Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation: Temporal Representation:	Water samples were collected at Sweetwater River stations 909SSWR08. Samples for Sweetwater River were collected in May 2005, September 2005, January 2006, and April 2006.
Environmental Conditions: QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 44310, Selenium
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	30915
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of 15 samples collected at Sweetwater River exceed the water quality objective of 5 Åµg/L for dissolved selenium. Samples for Sweetwater River were collected in from February 2002 to February 2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion: Objective/Criterion Reference:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000). Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline: Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation: Temporal Representation:	Water samples were collected at Sweetwater River just North of Bonita Rd Samples for Sweetwater River were collected February 2002 to February 2006.
Environmental Conditions: QAPP Information:	Quality assurance procedures in compliance with Weston Solutions Quality Assurance Manual.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

**DECISION ID 43751
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

Pollutant:	Toxicity
Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record from this cycle to assess pollutant. Fifteen of the 20 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of 20 samples from this cycle exceeded the Criteria and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43751, Toxicity
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	76855
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 909_SMC01258, Sweetwater River, lower.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43751, Toxicity
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77097
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	10
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected to test for toxicity. Ten of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 909SR-MLS Sweetwater River.
Temporal Representation:	The samples were collected from 2002 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43751, Toxicity
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	30897
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Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Toxicity was observed in the following tests.</p> <p>Selenastrum capricornutum-</p> <p>Seven of fifteen samples collected were found to be toxic.</p> <p>Ceriodaphnia dubia survival and reproduction: Five of 15 tests were found to be toxic.</p> <p>Hyalella azteca; No samples were toxic.</p>
Data Reference:	<p>Data was collected by San Diego County for their urban runoff monitoring program.</p> <p>Urban Runoff Monitoring, Volume 1- Final Report</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected from the Sweetwater River at Bonita Rd near Plaza Bonita.
Temporal Representation:	Samples were taken between February 2002 and February 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance Weston's quality assurance plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 43751, Toxicity
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	30899
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)

Data Used to Assess Water Quality:	<p>Toxicity was observed in the following data from the Storm Water Ambient Monitoring Program</p> <p>Selenastrum capricornutum- All three samples showed significant toxicity levels.</p> <p>Hyaella azteca - One of one samples were toxic for Hyaella growth in sediment.</p>
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected from the monitoring station Sweetwater River 8 located on the main stem of the Sweetwater River.
Temporal Representation:	Samples were taken between May 2005, September 2005, and January 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	53455	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence is available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 20 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53455, Arsenic
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID: 76931

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]

Temporal Representation: Data was collected on a single day 6/21/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

**Line of Evidence (LOE) for Decision ID 53455, Arsenic
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID: 78155

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 51636 Region 9	
Sweetwater River, Lower (below Sweetwater Reservoir)	
Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51636, Bifenthrin
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	76950
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected on a single day 10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID 53456
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 35 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 35 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53456, Cadmium**Region 9****Sweetwater River, Lower (below Sweetwater Reservoir)**

LOE ID: 76952

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]

Temporal Representation:	Data was collected 6/19/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53456, Cadmium
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	76962
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 53456, Cadmium
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	78161
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53458	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 18 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 18 samples exceed the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-
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Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53458, Chromium
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID: 76985

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Chromium.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]

Temporal Representation: Data was collected over the time period 2/17/2002-10/5/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

Line of Evidence (LOE) for Decision ID 53458, Chromium
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID: 76984

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	53459	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 33 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 33 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53459, Copper
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	76986
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 53459, Copper
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	76988
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 53459, Copper
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	76997
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Copper to protect aquatic life in freshwater. The dissolved Copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]

Temporal Representation:

Data was collected over the time period 2/17/2002-10/5/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

DECISION ID

51637

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

Pollutant:

Cypermethrin

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51637, Cypermethrin

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:

78169

Pollutant:

Cypermethrin

LOE Subgroup:

Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 51637, Cypermethrin
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	76998
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall

Objective/Criterion Reference:	not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected on a single day 10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	51638	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51638, Deltamethrin	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID:	77011
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected on a single day 10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53461	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment, and zero of nine samples exceed the Criteria in LOE #77012.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Considering the nation-wide ban of diazinon which went into effect on January 1, 2005, data from 2005 and on were evaluated in the assessment, and zero of nine samples exceed the Criteria in LOE #77012 and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53461, Diazinon
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	77014
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water lifetime health advisory for diazinon is 1 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston

Line of Evidence (LOE) for Decision ID 53461, Diazinon
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77013
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 3 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road, Sweetwater River @ Plaza Bonita Road]
Temporal Representation:	Data was collected over the time period 5/4/2006-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53461, Diazinon
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77012
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/11/2005 -10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 53461, Diazinon
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	78174
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Âµg/L.

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 3 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road, Sweetwater River @ Plaza Bonita Road]

Temporal Representation: Data was collected over the time period 5/4/2006-6/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	51639	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant: Esfenvalerate/Fenvalerate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one sample exceeded the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51639, Esfenvalerate/Fenvalerate	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID: 77025

Pollutant: Esfenvalerate/Fenvalerate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected on a single day 10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53460	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the 33 samples exceed the beneficial use guideline for Warm Freshwater Habitat use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 33 samples exceed the beneficial use guideline for Warm Freshwater Habitat use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53460, Lead
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID: 77043

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 17
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed County of San Diego NDPES data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Lead.

Data Reference: [Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Lead to protect aquatic life in freshwater. The dissolved Lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]

Temporal Representation: Data was collected over the time period 2/17/2002-10/5/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.](#)

**Line of Evidence (LOE) for Decision ID 53460, Lead
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID: 77041

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53460, Lead

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	77042
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 53460, Lead
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77027
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the lead guideline.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for lead is 0.015 mg/L (Title 22 of the California Code of Regulations). The level is also known as an action level under the Lead and Copper Rule.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

53462

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two line of evidence are available in the administrative record to assess this pollutant. Two of the 24 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 24 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53462, Malathion
Sweetwater River, Lower (below Sweetwater Reservoir)**Region 9**

LOE ID:	77059
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 12/16/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 53462, Malathion
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	78176
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 3 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road, Sweetwater River @ Plaza Bonita Road]
Temporal Representation:	Data was collected over the time period 5/4/2006-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53462, Malathion

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	77060
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 3 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road, Sweetwater River @ Plaza Bonita Road]
Temporal Representation:	Data was collected over the time period 5/4/2006-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53462, Malathion**Region 9****Sweetwater River, Lower (below Sweetwater Reservoir)**

LOE ID:	77044
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water lifetime health advisory for malathion is 500 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 12/16/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	53463	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 18 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of 18 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53463, Nickel	Region 9
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Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	77061
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 53463, Nickel**Region 9****Sweetwater River, Lower (below Sweetwater Reservoir)**

LOE ID:	77062
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nickel.

Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	52014	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 20 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52014, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
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Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	77078
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 52014, Nitrate/Nitrite (Nitrite + Nitrate as N)**Region 9****Sweetwater River, Lower (below Sweetwater Reservoir)**

LOE ID:	78178
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	52016	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 22 samples exceeded the guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52016, Nitrogen, Nitrite	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID:	78179
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 52016, Nitrogen, Nitrite
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77080
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation: Data was collected on a single day 6/21/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

Line of Evidence (LOE) for Decision ID 52016, Nitrogen, Nitrite
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID: 77079

Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]
Temporal Representation: Data was collected over the time period 6/19/2003-6/24/2003.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 52017

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

Pollutant: Nitrogen, ammonia (Total Ammonia)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of two samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52017, Nitrogen, ammonia (Total Ammonia)
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID: 76919

Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]

Temporal Representation: Data was collected over the time period 6/19/2003-6/24/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	53464	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant: Temperature, water

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.2 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53464, Temperature, water	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID: 77095

Pollutant: Temperature, water

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of the 0 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129). Since there is no evaluation guideline for assessing temperature for the warm freshwater aquatic life beneficial use, this line of evidence will not be used for Listing Decisions in the 2012 Integrated Report and will be retired for said Listing cycle.
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA. Davis
Spatial Representation:	Samples were collected at the following stations: SWT-010-Plaza Bonita Rd. SWT-020-S17 Sweetwater Rd.
Temporal Representation:	Samples were collected between January, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

DECISION ID		53465	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)			
Pollutant:	Zinc		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	New Decision		
Revision Status	Revised		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. One of the 33 samples exceed the Criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 33 samples exceed the Criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 		

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

**Line of Evidence (LOE) for Decision ID 53465, Zinc
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	78146
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

**Line of Evidence (LOE) for Decision ID 53465, Zinc
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	76858
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River, lower - 909_SMC01258]
Temporal Representation:	Data was collected on a single day 6/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 53465, Zinc

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	76856
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53465, Zinc	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID:	76877
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed County of San Diego NDPES data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 53465, Zinc	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID:	76857
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 2 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51757	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		
Pollutant:	Benthic Community Effects	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Hydromodification Illicit Connections/Illegal Hook-ups/Dry Weather Flows Source Unknown Unknown Nonpoint Source Unknown Point Source Urban Runoff/Storm Sewers	
Expected TMDL Completion Date:	2025	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.	

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant(s) contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	76949
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 14.3. SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected at 909_SMC01258, Sweetwater River, lower.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77930
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Chlorpyrifos. Three sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	79678
Pollutant:	Benthic-Macroinvertebrate Bioassessments

LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	A total of twelve samples were taken at three stations. Ten of the samples were below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. Two of the samples were not scored due to low organism counts.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations: SR-WS (SR-MLS), SMC01258, 909SSWR08
Temporal Representation:	The samples were collected from 2002 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project, the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program, and the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment. Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID: 76933

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 9 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 909SSWR08-Sweetwater River 8.
Temporal Representation:	Surveys done May 5, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77097
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	10
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected to test for toxicity. Ten of the 19 samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included growth of <i>Selenastrum capricornutum</i> and survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 909SR-MLS Sweetwater River.
Temporal Representation:	The samples were collected from 2002 to 2008.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Co-Permittees Receiving Waters Urban Runoff Monitoring and Reporting Program (Order No. 2007-01). Data quality is good.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77012
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/11/2005 -10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects**Region 9****Sweetwater River, Lower (below Sweetwater Reservoir)**

LOE ID:	77059
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Malathion.
Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 12/16/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston. The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects**Region 9****Sweetwater River, Lower (below Sweetwater Reservoir)**

LOE ID:	76855
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 909_SMC01258, Sweetwater River, lower.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	30888
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	11
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Eleven of 15 samples collected exceed the water quality objective. Since a maximum of four samples were collected at most in a one year period, any exceedance results in an annual exceedance frequency greater than 10% according to the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, concentrations of total dissolved solids cannot exceed 1500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	30897
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	<p>Toxicity was observed in the following tests.</p> <p>Selenastrum capricornutum- Seven of fifteen samples collected were found to be toxic.</p> <p>Ceriodaphnia dubia survival and reproduction: Five of 15 tests were found to be toxic.</p> <p>Hyalella azteca; No samples were toxic.</p>
Data Reference:	<p>Data was collected by San Diego County for their urban runoff monitoring program.</p> <p>Urban Runoff Monitoring, Volume 1- Final Report</p>
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.
Guideline Reference:	Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001
Spatial Representation:	Samples were collected from the Sweetwater River at Bonita Rd near Plaza Bonita.
Temporal Representation:	Samples were taken between February 2002 and February 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance Weston's quality assurance plan.
QAPP Information Reference(s):	Weston Solutions, 2004. Quality Management Manual. March 2004 (Revised December 2009).

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	30899
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Ambient toxicity testing (chronic)
Data Used to Assess Water Quality:	Toxicity was observed in the following data from the Storm Water Ambient Monitoring Program Selenastrum capricornutum- All three samples showed significant toxicity levels. Hyaella azteca - One of one samples were toxic for Hyaella growth in sediment.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code 'SLA') when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.
Guideline Reference:	Monitoring data for Region 9
Spatial Representation:	Samples were collected from the monitoring station Sweetwater River 8 located on the main stem of the Sweetwater River.
Temporal Representation:	Samples were taken between May 2005, September 2005, and January 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	30889
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the

Data Reference:	San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006. Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	30894
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirteen of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring. Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
	A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge.
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	30892
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Four of the four samples collected at Sweetwater River exceed the water quality objective of 5 µg/L for dissolved selenium according to results in California Surface Water Ambient Monitoring Program Report, 2007. Samples for Sweetwater River were collected in May 2005, September 2005, January 2006, and April 2006.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).
Objective/Criterion Reference:	Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency. Region IX. Water Division. San Francisco, CA

Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Water samples were collected at Sweetwater River stations 909SSWR08.
Temporal Representation:	Samples for Sweetwater River were collected in May 2005, September 2005, January 2006, and April 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51757, Benthic Community Effects

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

LOE ID:	72770
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Eleven of the eleven samples collected had IBI scores below 40. tr11c NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The samples were collected at stations SR-MLS and SR-WS Sweetwater River.
Temporal Representation:	The samples were collected twice a year in May and October from 2002 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

DECISION ID	53457	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		
Pollutant:	Chlorpyrifos	
Final Listing Decision:	List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Sources:	Source Unknown	
Expected TMDL Completion Date:	2025	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 14 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 14 samples exceed the criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 53457, Chlorpyrifos
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	76975
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 3 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road, Sweetwater River @ Plaza Bonita Road]
Temporal Representation:	Data was collected over the time period 5/4/2006-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 53457, Chlorpyrifos
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	78163
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 3 monitoring sites [Sweetwater River @ Plaza Bonita Road, Sweetwater River @ Willow Road, Sweetwater River @ Plaza Bonita Road]
Temporal Representation:	Data was collected over the time period 5/4/2006-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53457, Chlorpyrifos
Sweetwater River, Lower (below Sweetwater Reservoir)

Region 9

LOE ID:	77930
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, Lower (below Sweetwater Reservoir) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Chlorpyrifos. Three sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference:	Data for Various Pollutants from the County of San Diego Department of Public Works Watershed Protection Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.014 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Sweetwater River, Lower (below Sweetwater Reservoir) was collected at 1 monitoring site [Sweetwater River - 909SR-MLS]
Temporal Representation:	Data was collected over the time period 2/17/2002-10/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Weston, the Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products were followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Weston, The Regional Monitoring Workgroup Urban Runoff Monitoring Final Report Methods Sections and Statements of Work, and Weston Solutions Inc. Desk Reference for Quality Control Of Work Products.

DECISION ID	38315	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Sulfates
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 one line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. All three of the samples exceed the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All three of the samples exceeded the sulfate water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of five samples is needed for application of table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 38315, Sulfates
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	30886
Pollutant:	Sulfates
LOE Subgroup:	Pollution
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Three of three samples collected at Sweetwater River show excessive sulfate concentrations according to results in California Surface Water Ambient Monitoring Program Report, 2007. Samples were collected in January 2003, April 2003, and May 2003.
Data Reference:	Monitoring data for Region 9
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary drinking water standard for sulfate is 250 mg/l (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water samples were collected at Sweetwater River Stations 909SSWR08.
Temporal Representation:	Samples were collected in January 2003, April 2003, and May 2003
Environmental Conditions:	
QAPP Information:	Quality control for the chemical analysis portion of this study was conducted in accordance with the California Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 43867

Region 9

Sweetwater River, Lower (below Sweetwater Reservoir)

Pollutant:	Nitrogen
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Thirteen of the 15 samples exceed the water quality objective for total nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of 15 samples exceed the total nitrogen water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 43867, Nitrogen
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	30894
Pollutant:	Total Nitrogen as N
LOE Subgroup:	Health Advisories
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Thirteen of fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin

Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge.
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

DECISION ID	43923	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Phosphorus
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. All 15 of the samples exceed the water quality objective for phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All 15 samples exceed the phosphorus water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.
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Line of Evidence (LOE) for Decision ID 43923, Phosphorus	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)	

LOE ID:	30889
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan for the San Diego Basin
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

DECISION ID	44400	Region 9
Sweetwater River, Lower (below Sweetwater Reservoir)		

Pollutant:	Total Dissolved Solids
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>The decision has not changed from the previous listing cycle. No new data were assessed for the current listing cycle. Therefore, the previous conclusion remains unchanged, and is as follows:</p> <p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Eleven of 15 samples exceed the water quality objective for total dissolved solids.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of 15 samples exceed the total dissolved solids and this exceeds the allowable frequency
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listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

**Line of Evidence (LOE) for Decision ID 44400, Total Dissolved Solids
Sweetwater River, Lower (below Sweetwater Reservoir)**

Region 9

LOE ID:	30888
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	11
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	Eleven of 15 samples collected exceed the water quality objective. Since a maximum of four samples were collected at most in a one year period, any exceedance results in an annual exceedance frequency greater than 10% according to the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.
Data Reference:	Urban Runoff Monitoring, Volume 1- Final Report
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Basin Plan, concentrations of total dissolved solids cannot exceed 1500 mg/L. This concentration is not to be exceeded more than 10% of the time during any one year period (RWQCB, 2007).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed in Bonita, just north of Bonita Road and adjacent to the Plaza Bonita Road Bridge
Temporal Representation:	Samples were collected two to four times a year from 2002-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Federal Regulations under requirements of a NPDES permit
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach](#)
Water Body ID: CAC9011400020091116103327
Water Body Type: Coastal & Bay Shoreline

DECISION ID	43763	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status: Revised
Sources: See TMDL documentation | Surface Runoff
TMDL Name: Bacteria TMDL for San Diego Bay and Dana Point Harbor Shorelines
TMDL Project Code: 659
Date TMDL Approved by USEPA: 10/26/2009
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and [SECTION] of the Listing Policy. Under [SECTION] of the Policy, a minimum of one line of evidence is needed to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 176 of 571 samples exceed the SSM objective for total coliform (for SHELL) and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Bacteria TMDL for baby beach and shelter island was approved by USEPA on 10/26/2009.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	

LOE ID: 74637
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	247
Number of Exceedances:	38
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach to determine beneficial use support and results are as follows: 38 of 247 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach was collected at 4 monitoring sites [WEST END/BABY BEACH, BUOY LINE/BABY BEACH, SWIM AREA/BABY BEACH, EAST END/BABY BEACH] These stations are within 200 meters of eachother but were not averaged for this assessment.
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach

LOE ID:	30908
Pollutant:	Indicator Bacteria
LOE Subgroup:	Health Advisories
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	For the period from January 2000 to December 2006, there were 4433 beach postings days for all of Dana Point Harbor. When a bacteriological sample exceeds water quality standards, signs are posted indicating that waters have exceeded public health standards.
	Data and information on the number of beach posting were summarized by the County of Orange in their Annual Ocean and Bay Water Quality Report, March 2007. The reporting period was from January 2000 -December 2006. Data used was the number of days the beach was posting when the ocean or bay failed to meet the bacteriological standards.
Data Reference:	County of Orange. March 2007. Annual Ocean and Bay Water Quality Report, 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Code of Regulations. Title 17, Section 7960.

(a) When a public beach or public water-contact sports area fails to meet any of the standards as set forth in Section 7957 or 7958 above, the local health officer or the Department, after taking into consideration the causes therefor, may at his or its discretion close, post with warning signs, or otherwise restrict use of said public beach or public water-contact sports area, until such time as corrective action has been taken and the standards as set forth in 7957 and 7958 above are met.

Objective/Criterion Reference: [California Code of Regulations, Title 17, Section 7960](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Bacteriological monitoring samples were collected at Dana Point Harbor (Fuel Dock, Baby Beach, Pilgrim Dock, Youth Dock, Harbor Entrance, Guest Dock, Harbor Patrol Dock and M Dock).

Temporal Representation: The beach posting covers the time frame of January 2000 -December 2006.

Environmental Conditions:

QAPP Information: Samples were collected in compliance with County of Orange's Quality Assessment/Quality Control document (County of Orange, 2004).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach

LOE ID: 95653

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 434
Number of Exceedances: 55

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed beach monitoring data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach to determine beneficial use support and results are as follows: 55 of 434 samples exceed the criterion for Enterococcus.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that for the protection of REC-1 activities, the concentration of enterococcus should not exceed 104/100ml.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach was collected at 4 monitoring sites BDP 12, 13, 14, and 15. These stations are within 200 meters of eachother but were not averaged for this assessment.

Temporal Representation: Data was collected over the time period 2002 to 2006. Due to the installation of dry-weather diverter in 2005, only data from January 4, 2006 and beyond were included in the assessment.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach**

LOE ID:	81134
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	154
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach to determine beneficial use support and results are as follows: 14 of 154 samples exceed the criterion for Enterococcus.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that for the protection of REC-1 activities, the median concentration of enterococcus should not exceed 35/100ml in a 30-day period .
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach was collected at 4 monitoring sites [WEST END/BABY BEACH, BUOY LINE/BABY BEACH, SWIM AREA/BABY BEACH, EAST END/BABY BEACH] These stations are within 200 meters of eachother but were not averaged for this assessment.
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach**

LOE ID:	81133
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	247
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach to determine beneficial use support and results are as follows: 23 of 247 samples exceed the criterion for Enterococcus.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Ocean Plan states that for the protection of REC-1 activities, the concentration of enterococcus should not exceed 104/100ml.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach was collected at 4 monitoring sites [WEST END/BABY BEACH, BUOY LINE/BABY BEACH, SWIM AREA/BABY BEACH, EAST END/BABY BEACH] These stations are within 200 meters of eachother but were not averaged for this assessment.
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	

LOE ID:	81132
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	248
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach to determine beneficial use support and results are as follows: 3 of 248 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that for the protection of REC-1 activities, the concentration of fecal coliform should not exceed 400/100ml.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach was collected at 4 monitoring sites [WEST END/BABY BEACH, BUOY LINE/BABY BEACH, SWIM AREA/BABY BEACH, EAST END/BABY BEACH] These stations are within 200 meters of eachother but were not averaged for this assessment.
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	

LOE ID:	30905
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	324
Number of Exceedances:	138
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from a January 2002 through December 2006. One hundred thirty-eight of 324 samples exceeded the shellfish single sample maximum water quality objective for total coliform.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From the Ocean Plan, the median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Point Harbor at Baby Beach (station IDs, BDP 12, 13, 14 and 15), in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2002 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach

LOE ID:	30910
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 2006 through December 2006. One of 35 monthly geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Fecal coliform density shall not exceed 200 per 100ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Dana Point Harbor, (station id BDP 12, 13, 14, and 15), in the Dana Point HSA.

Temporal Representation: Samples were collected weekly from January 2002 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach

LOE ID: 30909

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 324

Number of Exceedances: 37

Data and Information Type: PWS pathogen monitoring (ambient water)

Data Used to Assess Water Quality: Beach monitoring data was collected from a January 2002 through December 2006. Thirty-seven of 324 samples exceeded the single sample maximum water quality objective.

Data Reference: [Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Single Sample Maximum: Fecal coliform density shall not exceed 400 per 100 ml;

Objective/Criterion Reference: [Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board. California Environmental Protection Agency](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Dana Point Harbor at Baby Beach, (station id BDP 12, 13,14 and 15), in the Dana Point HSA.

Temporal Representation: Samples were collected weekly from January 2002 through December 2006.

Environmental Conditions:

QAPP Information: Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.

QAPP Information Reference(s): [County of Orange. Quality Assurance/Quality Control Manual, February 2004](#)

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach

LOE ID: 30912

Pollutant: Enterococcus

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	9
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from a January 2002 through December 2006. Nine of 35 monthly geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Enterococcus density shall not exceed 35 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Point Harbor, (station id BDP 12, 13, 14, and 15), in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2002 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach

LOE ID:	30911
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	324
Number of Exceedances:	103
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from January 2002 through December 2006. One hundred-three of 324 samples exceeded the single sample water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Enterococcus density shall not exceed 104 per 100 ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Point Harbor, (station id BDP 12, 13, 14, and 15), in the

Temporal Representation:	Dana Point HSA.
Environmental Conditions:	Samples were collected weekly from January 2002 through December 2006.
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	

LOE ID:	30907
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected January 2002 through December 2006. None of the monthly geomeans exceeded the geomean water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Geomean: Total coliform density shall not exceed 1,000 per 100ml (SWRCB, 2005).
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Samples were collected from Dana Point Harbor at Baby Beach (station id BDP 12, 13, 14 and 15), in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2002 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange. Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	

LOE ID:	30906
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	324
Number of Exceedances:	2

Data and Information Type:	PWS pathogen monitoring (ambient water)
Data Used to Assess Water Quality:	Beach monitoring data was collected from a Janaury 2002 through December 2006. Two of 324 individual samples collected exceeded the single sample maximum water quality objective.
Data Reference:	Ocean Bacteriological Data Evaluation for Dana Point HSA, City of Dana Point, November 2005 - December 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Single Sample Maximum: Total coliform density shall not exceed 10,000 per 100ml;
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005, Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Dana Point Harbor at Baby Beach, (station ID BDP 12, 13, 14 and 15), in the Dana Point HSA.
Temporal Representation:	Samples were collected weekly from January 2002 through December 2006.
Environmental Conditions:	
QAPP Information:	Quality control for the bacteria analysis portion of this study was conducted in accordance with the County of Orange Quality Assessment/Quality Control document.
QAPP Information Reference(s):	County of Orange, Quality Assurance/Quality Control Manual, February 2004

Line of Evidence (LOE) for Decision ID 43763, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach

LOE ID:	81131
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	247
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach to determine beneficial use support and results are as follows: 38 of 247 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that for the protection of REC-1 activities, the concentration of total coliform should not exceed 10,000/100ml.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach was collected at 4 monitoring sites [WEST END/BABY BEACH, BUOY LINE/BABY BEACH, SWIM AREA/BABY BEACH, EAST END/BABY BEACH] These stations are within 200 meters of eachother but were not averaged for this assessment.
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay](#)
Water Body ID: CAB9063000020110714002546
Water Body Type: Bay & Harbor

DECISION ID	49435	Region 9
Mission Bay		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Evaluation Guideline for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 3.1 samples is needed to determine if a beneficial use is fully supported using table 16.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49435, Arsenic	Region 9
Mission Bay	

LOE ID: 74312

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49438	Region 9
Mission Bay		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the One</p>	

samples exceed the Evaluation Guideline for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49438, Cadmium

Region 9

Mission Bay

LOE ID:	74313
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1:

Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49439	Region 9
Mission Bay		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49439, Chlordane	Region 9
Mission Bay	

LOE ID:	74314
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49440	Region 9
Mission Bay		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 49440, Chlorpyrifos
Mission Bay**

Region 9

LOE ID:	74315
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)
[Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 12/7/2007

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49441	Region 9
Mission Bay		

Pollutant: Dieldrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dieldrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49441, Dieldrin	Region 9
Mission Bay	

LOE ID:	74316
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49443	Region 9
Mission Bay		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endosulfan.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endosulfan and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49443, Endosulfan
Mission Bay

Region 9

LOE ID: 74317

Pollutant: Endosulfan
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49445	Region 9
Mission Bay		
Pollutant:	Endrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Mission Bay

LOE ID:	74318
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Mission Bay

Pollutant: Heptachlor epoxide
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Heptachlor epoxide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Heptachlor Epoxide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49446, Heptachlor epoxide Mission Bay

Region 9

LOE ID: 74319

Pollutant: Heptachlor epoxide
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or

Objective/Criterion Reference:	aquatic organisms. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49448	Region 9
Mission Bay		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hexachlorobenzene/ HCB.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Hexachlorobenzene/ HCB and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49448, Hexachlorobenzene/ HCB

Region 9

Mission Bay

LOE ID:	74320
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49450	Region 9
Mission Bay		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49450, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Mission Bay	

LOE ID: 74321
Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish
Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference: [State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49453	Region 9
Mission Bay		

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Evaluation Guideline for Mirex.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Evaluation Guideline for Mirex and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49453, Mirex Mission Bay

Region 9

LOE ID:	74323
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007

Environmental Conditions:**QAPP Information:**

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at:
<http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49457	Region 9
Mission Bay		

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49457, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
Mission Bay	

LOE ID: 77214

Pollutant: PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49463	Region 9
Mission Bay		
Pollutant:	Selenium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.	

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49463, Selenium

Region 9

Mission Bay

LOE ID:	74325
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 12/7/2007

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49464	Region 9
Mission Bay		

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49464, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)	Region 9
Mission Bay	

LOE ID: 74326

Pollutant: Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

LOE Subgroup: Pollutant-Tissue

Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49467	Region 9
Mission Bay		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of Three samples exhibited sediment toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is SUFFICIENT justification AGAINST placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the Three samples exhibited sediment toxicity and this sample size is INSUFFICIENT to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49467, Toxicity
Mission Bay

Region 9

LOE ID:	74327
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. One of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of Eohaustorius estuarius. Each sample is a sediment composites from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The the composite samples were 906MB_2003, samples collected at sites

Temporal Representation:	906_MB3L1_2004, 906_MB3M1_2003, and 906_MB3R1_2003. Composite 906MB_2004 samples were collected 906_MB3L1_2004 and 906_MB3R1_2004. Composite 906MB_2005 samples were collected at sites, 906_MB1R1_2005, 906_MB2M1_2005, and 906_MB3R3_2005.
Environmental Conditions:	
QAPP Information:	The samples were collected in 2003, 2004, and 2005.
QAPP Information Reference(s):	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB-Order NO. R9-2007-0001). e-mail clarifying QAPP information

<div> <div>DECISION ID</div> <div>49452</div> <div>Region 9</div> </div> <div>Mission Bay</div>	
<div> <div>Pollutant:</div> <div>Final Listing Decision:</div> <div>Last Listing Cycle's Final Listing Decision:</div> <div>Revision Status</div> <div>Sources:</div> <div>Expected TMDL Completion Date:</div> <div>Impairment from Pollutant or Pollution:</div> </div>	<div> <div>Mercury</div> <div>List on 303(d) list (TMDL required list)</div> <div>New Decision</div> <div>Revised</div> <div>Atmospheric Deposition Source Unknown</div> <div>2027</div> <div>Pollutant</div> </div>
<div>Regional Board Conclusion:</div>	<div> <div> This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.4 and 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status. </div> <div> Two lines of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mercury. </div> <div> Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. </div> <div> This conclusion is based on the staff findings that: <ol style="list-style-type: none"> The data used satisfies the data quality requirements of section 6.1.4 of the Policy. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. Pursuant to Section 3.4 of the listing policy, there is a published State of California Office of Environmental Health Hazard Assessment Health Advisory for Eating Fish From San Diego Bay due to PCBs and Mercury. </div> </div>
<div>Regional Board Decision Recommendation:</div>	<div> After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. </div>

<div> <div>Line of Evidence (LOE) for Decision ID 49452, Mercury</div> <div>Mission Bay</div> </div> <div>Region 9</div>	
<div> <div>LOE ID:</div> <div>Pollutant:</div> <div>LOE Subgroup:</div> <div>Matrix:</div> <div>Fraction:</div> <div>Beneficial Use:</div> </div>	<div> <div>95682</div> <div>Mercury</div> <div>Pollutant-Tissue</div> <div>Tissue</div> <div>Fish fillet</div> <div>Commercial or recreational collection of fish, shellfish, or organisms</div> </div>

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and through the Surface Water Ambient Monitoring Program. These data were collected from 1999-2009 and were assessed by State of California staff at the Office of Environmental Health Hazard Assessment. These data are available in the California Environmental Data Exchange Network Database.
Data Reference:	Toxic Substances Monitoring Program data for years 1992-2002 and Coastal Fish Contamination Program for years 1 and 2. State Water Resources Control Board Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	<p>State of California Office of Environmental Health Hazard Assessment Health Advisory and Guidelines for Eating Fish From Mission Bay. October 2013. Section 3.4 of the Listing Policy Specifically states:</p> <p>"3.4 Health Advisories</p> <p>A water segment shall be placed on the section 303(d) list if a health advisory against the consumption of edible resident organisms, or a shellfish harvesting ban has been issued by the Office of Environmental Health Hazard Assessment (OEHHA), or Department of Health Services and there is a designated or existing fish consumption beneficial use for the segment. In addition, water segment-specific data must be available indicating the evaluation guideline for tissue is exceeded."</p> <p>This waterbody has a health advisory against the consumption of edible resident fish due to elevated levels of Mercury in fillet tissue.</p>
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and Surface Water Ambient Monitoring Program.
Temporal Representation:	Representative samples of locally abundant species were collected from 1999 to 2009.
Environmental Conditions:	
QAPP Information:	Samples collected and analyzed by State of California monitoring programs. Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000. Screening Study of Bioaccumulation on the California Coast Quality Assurance Program Plan 2009.
QAPP Information Reference(s):	Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000 Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA.

Mission Bay

LOE ID:	74322
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID

49461

Region 9

Mission Bay

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.4 and 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to Section 3.4 of the listing policy, there is a published State of California Office of Environmental Health Hazard Assessment Health Advisory for Eating Fish From San Diego Bay due to PCBs and Mercury.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49461, PCBs (Polychlorinated biphenyls)		Region 9
Mission Bay		
LOE ID:	95681	
Pollutant:	PCBs (Polychlorinated biphenyls)	
LOE Subgroup:	Pollutant-Tissue	
Matrix:	Tissue	
Fraction:	Fish fillet	
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms	
Number of Samples:	0	
Number of Exceedances:	0	
Data and Information Type:	Fish tissue analysis	
Data Used to Assess Water Quality:	Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and through the Surface Water Ambient Monitoring Program. These data were collected from 1999-2009 and were assessed by State of California staff at the Office of Environmental Health Hazard Assessment. These data are available in the California Environmental Data Exchange Network Database.	
Data Reference:	Toxic Substances Monitoring Program data for years 1992-2002 and Coastal Fish Contamination Program for years 1 and 2. State Water Resources Control Board Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA.	
SWAMP Data:	SWAMP	
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.	
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009	
Evaluation Guideline:	State of California Office of Environmental Health Hazard Assessment Health Advisory and	

Guidelines for Eating Fish From Mission Bay. October 2013. Section 3.4 of the Listing Policy Specifically states:

"3.4 Health Advisories

A water segment shall be placed on the section 303(d) list if a health advisory against the consumption of edible resident organisms, or a shellfish harvesting ban has been issued by the

Office of Environmental Health Hazard Assessment (OEHHA), or Department of Health Services and there is a designated or existing fish consumption beneficial use for the segment. In

addition, water segment-specific data must be available indicating the evaluation guideline for tissue is exceeded."

This waterbody has a health advisory against the consumption of edible resident fish due to elevated levels of PCBs in fillet tissue.

Guideline Reference:

[Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001](#)

Spatial Representation:

Samples were collected bay-wide as part of the State of California's Coastal Fish Contamination Program (Assembly Bill 2872) and Surface Water Ambient Monitoring Program.

Temporal Representation:

Representative samples of locally abundant species were collected from 1999 to 2009.

Environmental Conditions:

QAPP Information:

Samples collected and analyzed by State of California monitoring programs. Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000. Screening Study of Bioaccumulation on the California Coast Quality Assurance Program Plan 2009.

QAPP Information Reference(s):

[Data and quality assurance/quality control report for trace metals. Coastal fish contaminant project year 2, 1999-2000](#)
[Contaminants in Fish from the California Coast, 2009-2010: Summary Report on a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program \(SWAMP\). California State Water Resources Control Board, Sacramento, CA.](#)

Line of Evidence (LOE) for Decision ID 49461, PCBs (Polychlorinated biphenyls)

Region 9

Mission Bay

LOE ID: 74324

Pollutant: PCBs (Polychlorinated biphenyls)

LOE Subgroup: Pollutant-Tissue

Matrix: Tissue

Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: Shellfish surveys

Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVB, Mission Bay Ventura Bridge.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 12/7/2007
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park](#)
Water Body ID: CAC9011100020110512164024
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49978	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Data from 2006 to 2009 shows that zero of 138 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2006 to 2009 shows that zero of 138 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49978, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park	

LOE ID:	75182
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Heisler Park Stormdrain (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49978, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park

Region 9

LOE ID:	75183
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the total coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site HEISLR, Heisler Park Stormdrain at High Drive (surfzone upcoast and downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:	

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49978, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park

Region 9

LOE ID: 75177

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 149
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 149 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from site HEISLR, Heisler Park Stormdrain at High Drive (surfzone upcoast and downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to April 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49978, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park

Region 9

LOE ID: 75175

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 149
Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality:	Zero of the 149 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from site HEISLR, Heisler Park Stormdrain at High Drive (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to April 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49978, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park

Region 9

LOE ID:	75176
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Heisler Park Stormdrain (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

**Line of Evidence (LOE) for Decision ID 49978, Indicator Bacteria
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park****Region 9**

LOE ID:	75184
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 138 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Heisler Park Stormdrain (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street](#)
Water Body ID: CAC9011100020110512165314
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49945	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Water Quality Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49945, Cadmium	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street	

LOE ID: 74739
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved
Beneficial Use: Marine Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the three samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 1 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All three samples were collected from station LB-2d.
Temporal Representation:	Samples were collected from 2007 and 2008.
Environmental Conditions:	All samples are representative of dry conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49946	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49946, Chlorpyrifos
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street

Region 9

LOE ID:	74740
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of two samples exceeded the Criteria Continuous Concentration for Chlorpyrifos of 9 ng/L, however for one sample the reporting limit was 10 ng/L which is greater than the evaluation guideline, therefore this data is not usable.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected from site LB-2.
Temporal Representation:	Samples were collected 2007 to 2008.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID 49947
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Water Quality Objective for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49947, Copper
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

LOE ID:	74741
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	All three samples did not exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All three samples were collected from station LB-2d.
Temporal Representation:	Samples were collected from 2007 and 2008.
Environmental Conditions:	All samples are representative of dry conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**DECISION ID 49948
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Six samples exceed the Water Quality Criteria for Diazinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Six samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49948, Diazinon		Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		
LOE ID:	74742	
Pollutant:	Diazinon	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	Total Dissolved	
Beneficial Use:	Marine Habitat	
Number of Samples:	6	
Number of Exceedances:	0	
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)	
Data Used to Assess Water Quality:	None of the six samples exceed the maximum concentration for Diazinon criteria of 820.0 ng/L.	
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.	
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009	
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.	
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon	
Spatial Representation:	Samples were collected from site NI-1d.	
Temporal Representation:	Samples were collected from 2007 to 2009.	
Environmental Conditions:		
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance	

QAPP Information Reference(s):

DECISION ID	49949	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Water Quality Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49949, Lead	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street	

LOE ID: 74764

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality: None of the three samples exceed the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All three samples were collected from station LB-2d.
Temporal Representation:	Samples were collected from 2007 and 2008.
Environmental Conditions:	All samples are representative of dry conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49950	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Four samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49950, Malathion	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street	

LOE ID:	74765
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the samples exceeded the maximum concentration for Malathion of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected from site LB-2.
Temporal Representation:	Samples were collected between 5/21/08 and 9/13/07.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49955	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Objective for Nickel.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Water Quality Objective for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49955, Nickel
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

LOE ID:	74766
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	The reporting limits for all three non-detect samples exceed the water quality objective, these data could not be used in the assessment.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All three samples were collected from station LB-2d.
Temporal Representation:	Samples were collected from 2007 and 2008.
Environmental Conditions:	All samples are representative of dry conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**DECISION ID 49956
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Nitrogen, ammonia (Total Ammonia).</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Water Quality Objective for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49956, Nitrogen, ammonia (Total Ammonia)
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

LOE ID:	74767
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of three sample medians exceeded the water quality objective for total ammonia. Each samples was calculated a median using the sample and all other samples taken previously within a 180-day period.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Ocean Plan objective for total ammonia as nitrogen is a moving 6-month median of 600 ug/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Aster Street LBD2.
Temporal Representation:	Samples were collected on 9/13/07, 5/21/08 and 10/2/08.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	



Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Dissolved Oxygen.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Three samples exceeded the Water Quality Objective for Dissolved Oxygen and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49957, Oxygen, Dissolved	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street	

LOE ID:	74768
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 3 minimums of Dissolved Oxygen concentrations had no exceedences.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated MAR or WARM beneficial uses. The annual mean dissolved oxygen

concentration shall not be less than 7 mg/l more than 10% of the time.
[Water Quality Control Plan for the San Diego Basin](#)

Objective/Criterion Reference:

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected from the LB-2d station.

Temporal Representation: Samples were collected once in 2007 and twice in 2008.

Environmental Conditions:

QAPP Information: NPDES quality assurance.

QAPP Information Reference(s):

DECISION ID	49965	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		

Pollutant: Selenium

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Water Quality Objective for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49965, Selenium	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street	

LOE ID: 74769

Pollutant: Selenium

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Total Dissolved

Beneficial Use: Marine Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the three samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All three samples were collected from station LB-2d.
Temporal Representation:	Samples were collected from 2007 and 2008.
Environmental Conditions:	All samples are representative of dry conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49971	Region 9
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Silver.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Three samples exceeded the Water Quality Objective for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49971, Silver
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

LOE ID:	74770
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the three samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 0.7 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All three samples were collected from station LB-2d.
Temporal Representation:	Samples were collected from 2007 and 2008.
Environmental Conditions:	All samples are representative of dry conditions.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**DECISION ID 49974
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the Three samples exhibited water toxicity.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Three samples exhibited water toxicity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49974, Toxicity
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

LOE ID:	75156
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. One of the three samples exhibited statistically significant toxicity. The toxicity tests that exhibited significant toxicity included Purple Urchin development.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station LB-2d Coastal Stormdrain.
Temporal Representation:	The samples were collected in September and May 2007 and October 2008.
Environmental Conditions:	
QAPP Information:	The data collected under the Quality Assurance Management Plan for The Orange County Stormwater Program. The SWAMP measurement quality objectives were followed for toxicity data. The performance of toxicity bioassays and evaluation of reference toxicants were performed using USEPA and Standard Methods.
QAPP Information Reference(s):	

**DECISION ID 49975
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:**

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the Water Quality Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the Water Quality Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49975, Zinc
Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street**

Region 9

LOE ID: 75157

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality: None of the three samples exceed the water quality objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L to protect aquatic life in marine waters.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: All three samples were collected from station LB-2d.
Temporal Representation: Samples were collected from 2007 and 2008.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

All samples are representative of dry conditions.

Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street](#)
Water Body ID: CAC9011100020110822095920
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49824	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Using the latest data, four of the 131 samples exceed the water quality objective for enterococcus of a geometric mean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Using the latest data, four of the 131 samples exceed the water quality objective for enterococcus of a geometric mean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49824, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street	

LOE ID: 74664

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 131

Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 131 geomeans exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from Coastal Stormdrain Between Pearl and Agate Streets (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49824, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street

Region 9

LOE ID:	74663
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 146 samples exceeded the enterococcus objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample enterococcus concentration shall not exceed more than 104/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from coastal stormdrain between Pearl and Agate streets (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49824, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street

LOE ID: 74666

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 131
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 131 geomeans exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for fecal coliform shall not exceed more than 200/100ml. Water Quality Control Plan for the San Diego Basin. California Ocean Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain Between Pearl and Agate Streets (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:
QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49824, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street

LOE ID: 74688

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 131
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: None of the 131 samples exceeded the total coliform objective. For these stations, samples

were collected from surfzone upcoast and surfzone downcoast. The higher of the two values was used for the geomean calculation.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean for total coliform shall not exceed more than 1000/100ml. Water Quality Control Plan for the San Diego Basin. Water Quality Control Plan for Ocean Waters.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from Coastal Stormdrain Between Pearl and Agate Streets(surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49824, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street

LOE ID: 74667

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 146
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 146 samples exceeded the total coliform objective. For these stations, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The single sample total coliform concentration shall not exceed more than 10000/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basion Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected from coastal stormdrain between Pearl and Agate Streets (surfzone upcoast and surfzone downcoast).

Temporal Representation: The samples were collected once a week from July 2006 to 2009.

Environmental Conditions:

QAPP Information: The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49824, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street

Region 9

LOE ID:	74665
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 146 samples exceeded the fecal coliform objective. For this station, samples were collected from surfzone upcoast and surfzone downcoast. The results represent the higher of the two values.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample fecal coliform concentration shall not exceed more than 400/100ml. Water Quality Control Plan for Ocean Waters of California. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from coastal stormdrain between Pearl and Agate Street (surfzone upcoast and surfzone downcoast).
Temporal Representation:	The samples were collected once a week from July 2006 to 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed under the Quality Assurance Management Plan for The Orange County Stormwater Program. Coastal Stormdrain Outfall Monitoring Program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge](#)
Water Body ID: CAC9011400020110512155207
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49703	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Objective for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49703, Arsenic	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge	

LOE ID: 74482
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved
Beneficial Use: Marine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the five samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 8 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49708	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

LOE ID:	74483
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the five samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 1 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49713

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of Two samples exceeded the Water Quality Critier for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49713, Chlorpyrifos

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

LOE ID:	74484
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of two samples exceeded the Criteria Continuous Concentration for Chlorpyrifos of 9 ng/L. However, the reporting limits for three non-detect samples were 10 ng/L which is greater than the evaluation guideline, therefore these data were not usable.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for chlorpyrifos in saltwater is 9 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Samples were collected at site N1-d
Temporal Representation:	Samples were collected 2007 to 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49715

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Objective for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49715, Copper

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

LOE ID:	74485
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the five samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance

QAPP Information Reference(s):

DECISION ID	49717	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge		

Pollutant: Diazinon
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49717, Diazinon	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge	

LOE ID: 74486

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total Dissolved

Beneficial Use: Marine Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: None of the five samples exceeded the Criteria Continuous Concentration for diazinon of 820 ng/L.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, "The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The Criteria Continuous Concentration for diazinon in saltwater is 820 ng/L.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Diazinon
Spatial Representation:	Samples were collected at site NI-1d.
Temporal Representation:	Samples were collected 2007 to 2009
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49719	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Five samples exceeded the Water Quality Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49719, Lead	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge	

LOE ID:	74494
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Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the five samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 2 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49720	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Five samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49720, Malathion

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

LOE ID:	74495
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the five samples exceeded the maximum concentration for Malathion of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in saltwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Samples were collected at site NI-1d.
Temporal Representation:	Samples were collected 2007 to 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49725

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective for Nickel.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Objective Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49725, Nickel

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

LOE ID:	74497
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	The five samples did not exceed the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 5 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID 49727

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

Pollutant: Nitrogen, ammonia (Total Ammonia)

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Objective for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49727, Nitrogen, ammonia (Total Ammonia)
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

Region 9

LOE ID: 74498

Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Marine Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: None of five sample medians exceeded the water quality objective for total ammonia. Each samples was calculated a median using the sample and all other samples taken previously within a 180-day period.

Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Ocean Plan objective for total ammonia as nitrogen is a moving 6-month median of 600 ug/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information:

Samples were collected at station NI-1.
Samples were collected from September 2007 to April 2009.

A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will be used to satisfy the objectives of the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID	49728	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Objective for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49728, Selenium	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge	

LOE ID:	74499
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the five samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 15 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID	49730	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Objective for Silver.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Objective for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

LOE ID:	74500
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the five samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 0.7 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID

49734

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of Five samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49734, Zinc

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge

LOE ID:	74512
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
Data Used to Assess Water Quality:	None of the five samples exceed the water quality objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	All five samples were collected from station NI-1d.
Temporal Representation:	Samples were collected from 2007 through 2009.
Environmental Conditions:	One sample was collected after a storm event.
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline at Dana Point](#)
Water Body ID: CAC9011400020110713230657
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49582	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Evaluation Guideline for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49582, Arsenic	Region 9
Pacific Ocean Shoreline at Dana Point	

LOE ID: 74602

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49610	Region 9
Pacific Ocean Shoreline at Dana Point		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One</p>	

samples exceed the Evaluation Guideline for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49610, Cadmium
Pacific Ocean Shoreline at Dana Point**

Region 9

LOE ID:	74603
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1:

Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49615	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49615, Chlordane	Region 9
Pacific Ocean Shoreline at Dana Point	

LOE ID:	74612
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49617	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 49617, Chlorpyrifos
Pacific Ocean Shoreline at Dana Point**

Region 9

LOE ID:	74613
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)
[Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 1/8/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at:
<http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49621	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant: Dieldrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dieldrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49621, Dieldrin	Region 9
Pacific Ocean Shoreline at Dana Point	

LOE ID:	74614
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49623	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endosulfan.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endosulfan and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49623, Endosulfan
Pacific Ocean Shoreline at Dana Point

Region 9

LOE ID: 74623

Pollutant: Endosulfan
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49624	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Pacific Ocean Shoreline at Dana Point

LOE ID:	74624
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pacific Ocean Shoreline at Dana Point

Pollutant: Heptachlor epoxide
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hepachlor epoxide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Heptachlor epoxide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49625, Heptachlor epoxide

Region 9

Pacific Ocean Shoreline at Dana Point

LOE ID: 74625

Pollutant: Heptachlor epoxide
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s)

Objective/Criterion Reference:	that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49626	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hexachlorobenzene/ HCB.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Hexachlorobenzene/ HCB and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49626, Hexachlorobenzene/ HCB
Pacific Ocean Shoreline at Dana Point**

Region 9

LOE ID:	74633
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at:

QAPP Information Reference(s):

DECISION ID	49628	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49628, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Pacific Ocean Shoreline at Dana Point	

LOE ID: 74634

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49630	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mercury.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49630, Mercury
Pacific Ocean Shoreline at Dana Point**

Region 9

LOE ID:	74635
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

QAPP Information Reference(s):

DECISION ID	49632	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mirex.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mirex and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49632, Mirex	Region 9
Pacific Ocean Shoreline at Dana Point	

LOE ID:	74644
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were

Data Reference:	calculated by multiplying 3.18 by the MDL. State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49634	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49634, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Pacific Ocean Shoreline at Dana Point

LOE ID:	74645
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the screening criteria. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49635	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	PCBs (Polychlorinated biphenyls) Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PCBs (Polychlorinated biphenyls).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for PCBs (Polychlorinated biphenyls) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49635, PCBs (Polychlorinated biphenyls)		Region 9
Pacific Ocean Shoreline at Dana Point		

LOE ID: Pollutant: LOE Subgroup: Matrix: Fraction:	74646 PCBs (Polychlorinated biphenyls) Pollutant-Tissue Tissue Shellfish
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Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49637	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49637, Selenium

Region 9

Pacific Ocean Shoreline at Dana Point

LOE ID:	74477
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49638	Region 9
Pacific Ocean Shoreline at Dana Point		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49638, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)	Region 9
Pacific Ocean Shoreline at Dana Point	

LOE ID:	74478
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site DNPT.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/8/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach](#)
Water Body ID: CAC9015100020111101110839
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50000	Region 9
Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence are necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that 0 of 16 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that 0 of 16 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50000, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach	

LOE ID: 75091

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 16 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Onofre State Beach at Churchs Beach site.
Temporal Representation:	Samples were collected from April 2008 to December 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50000, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach

LOE ID:	77674
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 16 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach.
Temporal Representation:	The samples were collected from April 2008 to December 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50000, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach**

LOE ID:	75094
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 16 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the San Onofre State Beach at Churchs Beach site.
Temporal Representation:	Samples were collected from April 2008 to December 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50000, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach**

LOE ID:	75093
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Church's Beach was collected at 1 monitoring site [Church's San Onofre Crk]

Temporal Representation: Data was collected over the time period 4/3/2008-12/22/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50000, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Church's Beach

LOE ID: 75092

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 16

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 16 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the San Onofre State Beach at Church's Beach site.

Temporal Representation: Samples were collected from April 2008 to December 2009.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach \(near Palomar Airport Road\)](#)
Water Body ID: CAC9043100020111101101357
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49830	Region 9
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road)		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Including the latest data, zero of the 128 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Including the latest data, zero of the 128 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49830, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road)	

LOE ID: 74747
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Palomar Airport site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49830, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road)	

LOE ID:	74748
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Palomar Airport site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49830, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road)	

LOE ID:	74749
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Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	135
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road) to determine beneficial use support and results are as follows: 0 of 135 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road) was collected at 1 monitoring site [Palomar Airport]
Temporal Representation:	Data was collected over the time period 1/7/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49830, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road)

LOE ID:	74750
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at the Palomar Airport site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49830, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road)

LOE ID:	77631
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 128 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road).
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty](#)
Water Body ID: CAC9043100020111101103904
Water Body Type: Coastal & Bay Shoreline

DECISION ID 49828 **Region 9**
Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Using 2008-2010 data, two of the 53 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Using 2008-2010 data, two of the 53 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49828, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty

LOE ID: 74719
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 53

Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 53 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Warm Water Jetty site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49828, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty

LOE ID:	74720
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 53 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Warm Water Jetty site.
Temporal Representation:	Samples were collected from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49828, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty

LOE ID:	77629
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 53 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty.
Temporal Representation:	The samples were collected from April 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49828, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty

LOE ID:	74722
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 53 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Warm Water Jetty site.

Temporal Representation:

Samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49828, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty

LOE ID: 74721

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 62
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty was collected at 1 monitoring site [Warm Water Jetty]

Temporal Representation: Data was collected over the time period 4/3/2008-8/26/2010.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave](#)
Water Body ID: CAC9043100020111101104452
Water Body Type: Coastal & Bay Shoreline

DECISION ID 49831 **Region 9**
Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Using 2008 to 2010 data, zero of the 71 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Using 2008 to 2010 data, zero of the 71 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49831, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

LOE ID: 74772
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 71

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 71 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tamarack Ave site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49831, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

LOE ID:	77632
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	71
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 71 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach (near Palomar Airport Road).
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49831, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

LOE ID:	74773
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	91
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave to determine beneficial use support and results are as follows: 1 of 91 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave was collected at 1 monitoring site [Tamarack Av]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49831, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave**

LOE ID:	74774
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	71
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 71 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Tamarack Ave site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49831, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

LOE ID: 74771

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 71
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 71 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Tamarack Ave site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

DECISION ID

49832

Region 9

Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

Pollutant: Trash
Final Listing Decision: List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected Attainment Date: 2029
Implementation Action Other than TMDL: Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water

segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: The San Diego Coastkeeper cleanups occurred on 8/11/07, 8/9/08, 8/8/09, 8/7/10 for this water body. The total weight of trash (lbs) collected on these dates was 536.25. However, using the metric, Coastkeeper classified this water body as medium for trash impairment. Coastkeeper cleanups also occurred on 2/10/07, 2/9/08, 2/14/09, and 2/13/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,271.4. However, using the metric, Coastkeeper classified this water body as high for trash impairment. Any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49832, Trash

Region 9

Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

LOE ID:	74775
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 8/11/07, 8/9/08, 8/8/09, 8/7/10 for this water body. The total weight of trash (lbs) collected on these dates was 536.25. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Carlsbad - Tamarack Beach. Two lines of evidence are being created for this water body (Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave) because cleanups that occurred at Carlsbad - Ponto Jetty were less than 200 meters away.
Temporal Representation:	Four cleanups occurred on 8/11/07, 8/9/08, 8/8/09, 8/7/10.
Environmental Conditions:	

QAPP Information: San Diego Coastkeeper QAPP provided.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49832, Trash

Region 9

Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave

LOE ID:	74776
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 2/10/07, 2/9/08, 2/14/09, and 2/13/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,271.4. However, using the metric, Coastkeeper classified this water body as high for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Carlsbad - Ponto Jetty. Two lines of evidence are being created for this water body (Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave) because cleanups that occurred at Carlsbad - Tamarack State Beach were less than 200 meters away.
Temporal Representation:	Four cleanups that occurred on 2/10/07, 2/9/08, 2/14/09, and 2/13/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(near Pointsettia Lane\)](#)
Water Body ID: CAC9045100020111101100109
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49679	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 128 samples exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 128 samples exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49679, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane)	

LOE ID:	74576
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Poinsettia Lane site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49679, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane)

LOE ID:	74573
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Poinsettia Lane site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49679, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane)

LOE ID:	77589
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 128 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane).
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49679, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane)

LOE ID:	74575
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane) to determine beneficial use support and results are as follows: 0 of 134 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane) was collected at 1 monitoring site [Pointsettia Lane]

Temporal Representation: Data was collected over the time period 1/7/2008-8/23/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49679, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Pointsettia Lane)

LOE ID: 74574

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 128

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 128 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Pointsettia Lane site.

Temporal Representation: Samples were collected approximately once a week from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(near Ponto Drive and Island Way\)](#)
Water Body ID: CAC9045100020111101100443
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49680	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way)		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 128 samples exceed the Water Quality Objective for enterococcus of a geometric mean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 128 samples exceed the Water Quality Objective for enterococcus of a geometric mean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49680, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way)	

LOE ID: 74578
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation

Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ponto Drive site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49680, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way)	

LOE ID:	77590
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 128 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way).
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49680, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way)

LOE ID: 74583

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 128
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 128 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Ponto Drive site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49680, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way)**

LOE ID: 74577

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 128
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 128 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Ponto Drive site.

Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49680, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way)**

LOE ID:	74579
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way) to determine beneficial use support and results are as follows: 0 of 134 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (near Ponto Drive and Island Way) was collected at 1 monitoring site [Ponto Drive]
Temporal Representation:	Data was collected over the time period 1/7/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(Encina Creek Outlet\)](#)
Water Body ID: CAC9045100020111101100825
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49678	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet)		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 128 samples exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 128 samples exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49678, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet)	

LOE ID: 77588

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 128

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 128 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet).
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49678, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet)	

LOE ID:	74572
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Encina Creek outlet site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49678, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet)

LOE ID:	74567
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet) to determine beneficial use support and results are as follows: 0 of 134 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet) was collected at 1 monitoring site [Encina Creek outlet]
Temporal Representation:	Data was collected over the time period 1/7/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49678, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet)**

LOE ID:	74566
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Encina Creek outlet site.
Temporal Representation: Samples were collected approximately once a week from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49678, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach (Encina Creek Outlet)	

LOE ID:	74565
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Encina Creek outlet site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline at Cardiff Reef](#)
Water Body ID: CAC9046100020110713232212
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49495	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Evaluation Guideline for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49495, Arsenic	Region 9
Pacific Ocean Shoreline at Cardiff Reef	

LOE ID: 74539

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49500	Region 9
Pacific Ocean Shoreline at Cardiff Reef		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the</p>	

One samples exceed the Evaluation Guideline for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49500, Cadmium
Pacific Ocean Shoreline at Cardiff Reef**

Region 9

LOE ID:	74547
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1:

Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49501	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49501, Chlordane	Region 9
Pacific Ocean Shoreline at Cardiff Reef	

LOE ID:	74548
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49502	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49502, Chlorpyrifos
Pacific Ocean Shoreline at Cardiff Reef

Region 9

LOE ID:	74549
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)
[Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 1/20/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49504	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant: Dieldrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dieldrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49504, Dieldrin	Region 9
Pacific Ocean Shoreline at Cardiff Reef	

LOE ID:	74557
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49506	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endosulfan.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endosulfan and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49506, Endosulfan
Pacific Ocean Shoreline at Cardiff Reef

Region 9

LOE ID: 74558

Pollutant: Endosulfan
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49509	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Pacific Ocean Shoreline at Cardiff Reef

LOE ID:	74559
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pacific Ocean Shoreline at Cardiff Reef

Pollutant: Heptachlor epoxide
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Heptachlor epoxide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Heptachlor Epoxide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49517, Heptachlor epoxide

Region 9

Pacific Ocean Shoreline at Cardiff Reef

LOE ID: 74569

Pollutant: Heptachlor epoxide
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s)

Objective/Criterion Reference:	that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49519	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hexachlorobenzene/ HCB.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Hexachlorobenzene/ HCB and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49519, Hexachlorobenzene/ HCB
Pacific Ocean Shoreline at Cardiff Reef**

Region 9

LOE ID:	74570
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at:

QAPP Information Reference(s):

DECISION ID	49494	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Three of the 101 samples exceed the Water Quality Objective for Total Coliform of a SSM of 230 cfu/100 ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five lines of evidence are available in the administrative record to assess this pollutant. Three of the 101 samples exceed the Water Quality Objective for Total Coliform of a SSM of 230 cfu/100 ml for the protection of SHELL beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49494, Indicator Bacteria	Region 9
Pacific Ocean Shoreline at Cardiff Reef	

LOE ID:	77617
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 97 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline at Cardiff Reef station Tide Beach Park.
Temporal Representation:	The samples were collected from February 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49494, Indicator Bacteria

Region 9

Pacific Ocean Shoreline at Cardiff Reef

LOE ID:	74593
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	136
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 136 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tide Beach Park site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49494, Indicator Bacteria

Region 9

Pacific Ocean Shoreline at Cardiff Reef

LOE ID:	74592
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	101
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BeachWatch data for Pacific Ocean Shoreline, San Elijo HSA, at Tide Beach Park to determine beneficial use support and results are as follows: 3 of 101 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Elijo HSA, at Tide Beach Park was collected at 1 monitoring site [Tide Beach center]
Temporal Representation:	Data was collected over the time period 02/25/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49494, Indicator Bacteria

Region 9

Pacific Ocean Shoreline at Cardiff Reef

LOE ID:	74560
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	135
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 135 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tide Beach Park site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 49494, Indicator Bacteria**Region 9****Pacific Ocean Shoreline at Cardiff Reef**

LOE ID:	74568
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	136
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 136 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Tide Beach Park site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

DECISION ID 49522
Pacific Ocean Shoreline at Cardiff Reef
Region 9

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
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3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49522, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 9

Pacific Ocean Shoreline at Cardiff Reef

LOE ID:	74571
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on

1/20/2008

Environmental Conditions:
QAPP Information:

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at:
<http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49526	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mercury.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49526, Mercury	Region 9
Pacific Ocean Shoreline at Cardiff Reef	

LOE ID:	74580
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49549	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mirex.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mirex and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49549, Mirex
Pacific Ocean Shoreline at Cardiff Reef**

Region 9

LOE ID:	74581
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on

1/20/2008

Environmental Conditions:

QAPP Information:

Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49550	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49550, PAHs (Polycyclic Aromatic Hydrocarbons)	Region 9
Pacific Ocean Shoreline at Cardiff Reef	

LOE ID:	74582
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result does not exceed the the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49553	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	PCBs (Polychlorinated biphenyls)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PCBs (Polychlorinated biphenyls).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PCBs (Polychlorinated biphenyls) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49553, PCBs (Polychlorinated biphenyls)
Pacific Ocean Shoreline at Cardiff Reef**

Region 9

LOE ID:	74590
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49559	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49559, Selenium	Region 9
Pacific Ocean Shoreline at Cardiff Reef	

LOE ID:	74591
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Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/20/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49565	Region 9
Pacific Ocean Shoreline at Cardiff Reef		

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49565, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

Region 9

Pacific Ocean Shoreline at Cardiff Reef

LOE ID:	74601
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result exceeded the the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999;

Guideline Reference:	<p>Klasing, S., and R. Brodberg, 2008) Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene</p>
Spatial Representation:	<p>Samples are collected by hand from three sub-locations for each site. The composite sample was collected from Cardiff Reef in the City of Encinitas, site CDRF.</p>
Temporal Representation:	<p>Representative samples of locally abundant species were collected during the winter on 1/20/2008</p>
Environmental Conditions:	
QAPP Information:	<p>Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/</p>
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach](#)
Water Body ID: CAC9046100020111027150543
Water Body Type: Coastal & Bay Shoreline

DECISION ID 49915 **Region 9**
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. With data from 2008 to 2010, zero of the 138 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With data from 2008 to 2010, zero of the 138 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49915, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach

LOE ID: 77651
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Shellfish Harvesting
Number of Samples: 139

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 139 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach.
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49915, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach	

LOE ID:	75022
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 139 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Fletcher Cove Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49915, Indicator Bacteria	Region 9
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Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach

LOE ID:	75021
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	142
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach to determine beneficial use support and results are as follows: 9 of 142 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach was collected at 1 monitoring site [Fletcher Cove outlet]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49915, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach**

LOE ID:	75020
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 139 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Fletcher Cove Beach site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49915, Indicator Bacteria
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach

Region 9

LOE ID: 75019

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 138 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Fletcher Cove Beach site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas \(Georges\)](#)
Water Body ID: CAC9046100020111027151147
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49939	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges)		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that zero of 134 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that zero of 134 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49939, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges)	

LOE ID: 74658

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Las Olas (Georges) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49939, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges)

LOE ID:	77663
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One of the 134 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges).
Temporal Representation:	The samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49939, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges)

LOE ID:	74659
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Las Olas (Georges) site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49939, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges)**

LOE ID:	74660
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	137
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges) to determine beneficial use support and results are as follows: 2 of 137 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges) was collected at 1 monitoring site [Las Olas (Georges)]

Temporal Representation: Data was collected over the time period 1/2/2008-8/23/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49939, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas (Georges)

LOE ID: 74661

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 134 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Las Olas (Georges) site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking](#)
Water Body ID: CAC9046100020111027151529
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49938	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that zero of 134 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that zero of 134 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49938, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking	

LOE ID: 75059

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Chart House parking site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49938, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking

LOE ID:	74656
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	137
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking to determine beneficial use support and results are as follows: 5 of 137 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking was collected at 1 monitoring site [Charthouse parking]
Temporal Representation:	Data was collected over the time period 1/2/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49938, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking

LOE ID:	74657
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Chart House parking site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49938, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking

LOE ID:	77662
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One of the 134 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking.

Temporal Representation: The samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49938, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking

LOE ID: 74655

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 134

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 134 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at the Chart House parking site.

Temporal Representation: Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline at Scripps Reef](#)
Water Body ID: CAC9063000020110713232616
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49639	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the Evaluation Guideline for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Evaluation Guideline for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49639, Arsenic	Region 9
Pacific Ocean Shoreline at Scripps Reef	

LOE ID: 74479

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The one sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49640	Region 9
Pacific Ocean Shoreline at Scripps Reef		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One</p>	

samples exceed the Evaluation Guideline for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49640, Cadmium

Region 9

Pacific Ocean Shoreline at Scripps Reef

LOE ID:	74487
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1:

Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49641	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlordane.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Chlordane and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49641, Chlordane	Region 9
Pacific Ocean Shoreline at Scripps Reef	

LOE ID:	74488
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49643	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 49643, Chlorpyrifos
Pacific Ocean Shoreline at Scripps Reef**

Region 9

LOE ID:	74489
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

[Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment](#)
[Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene](#)
[Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis](#)

Spatial Representation: Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.

Temporal Representation: Representative samples of locally abundant species were collected during the winter on 2/6/2008

Environmental Conditions:

QAPP Information: Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: <http://ccma.nos.noaa.gov/stressors/pollution/nsandt/>

QAPP Information Reference(s):

DECISION ID	49644	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant: Dieldrin

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Dieldrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Dieldrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49644, Dieldrin	Region 9
Pacific Ocean Shoreline at Scripps Reef	

LOE ID:	74501
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49645	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	Endosulfan
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endosulfan.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Endosulfan and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49645, Endosulfan
Pacific Ocean Shoreline at Scripps Reef

Region 9

LOE ID: 74502

Pollutant: Endosulfan
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 49646		Region 9
Pacific Ocean Shoreline at Scripps Reef		
Pollutant:	Endrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Endrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Endrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Pacific Ocean Shoreline at Scripps Reef

LOE ID:	74503
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Pacific Ocean Shoreline at Scripps Reef

Pollutant: Heptachlor epoxide
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Heptachlor epoxide.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Hepachlor epoxide and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49648, Heptachlor epoxide

Region 9

Pacific Ocean Shoreline at Scripps Reef

LOE ID: 74515

Pollutant: Heptachlor epoxide
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference: [State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s)

Objective/Criterion Reference:	that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms. California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49649	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	Hexachlorobenzene/ HCB
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Hexachlorobenzene/ HCB.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Hexachlorobenzene/ HCB and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49649, Hexachlorobenzene/ HCB
Pacific Ocean Shoreline at Scripps Reef**

Region 9

LOE ID:	74516
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at:

QAPP Information Reference(s):

DECISION ID	49650	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Lindane/gamma Hexachlorocyclohexane (gamma-HCH) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49650, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Pacific Ocean Shoreline at Scripps Reef	

LOE ID: 74517

Pollutant: Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Shellfish

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Shellfish surveys
Data Used to Assess Water Quality: The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49653	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Mercury.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Mercury and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49653, Mercury
Pacific Ocean Shoreline at Scripps Reef**

Region 9

LOE ID:	74530
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

QAPP Information Reference(s):

DECISION ID	49654	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	Mirex
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Evaluation Guideline for Mirex.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Evaluation Guideline for Mirex and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49654, Mirex	Region 9
Pacific Ocean Shoreline at Scripps Reef	

LOE ID:	74531
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The detected not quantifiable result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL

Data Reference:	were calculated by multiplying 3.18 by the MDL. State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49655	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for PAHs (Polycyclic Aromatic Hydrocarbons) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49655, PAHs (Polycyclic Aromatic Hydrocarbons)

Region 9

Pacific Ocean Shoreline at Scripps Reef

LOE ID:	77215
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49657	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	PCBs (Polychlorinated biphenyls) Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for PCBs (Polychlorinated biphenyls).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for PCBs (Polychlorinated biphenyls) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49657, PCBs (Polychlorinated biphenyls)		Region 9
Pacific Ocean Shoreline at Scripps Reef		

LOE ID: Pollutant: LOE Subgroup: Matrix: Fraction:	74490 PCBs (Polychlorinated biphenyls) Pollutant-Tissue Tissue Shellfish
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Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49658	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Evaluation Guideline for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49658, Selenium

Region 9

Pacific Ocean Shoreline at Scripps Reef

LOE ID:	74491
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000: Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	49659	Region 9
Pacific Ocean Shoreline at Scripps Reef		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of One samples exceeded the Evaluation Guideline for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49659, Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)		Region 9
Pacific Ocean Shoreline at Scripps Reef		

LOE ID: Pollutant: LOE Subgroup:	74492 Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) Pollutant-Tissue
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Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	The result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Region: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SCRF.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/6/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program. Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, La Cima Drive at Crown Point Shores](#)
Water Body ID: CAC9063000020111027113842
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49434	Region 9
Mission Bay Shoreline, La Cima Drive at Crown Point Shores		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Four of the 35 samples exceed the Water Quality Objective for enterococci of a geomean of 35 cfu/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 35 samples exceed the Water Quality Objective for enterococci of a geomean of 35 cfu/100 ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49434, Indicator Bacteria	Region 9
Mission Bay Shoreline, La Cima Drive at Crown Point Shores	

LOE ID:	74383
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35

Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 35 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Crown Point site.
Temporal Representation:	Samples were collected approximately once a week from June 2009 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49434, Indicator Bacteria

Region 9

Mission Bay Shoreline, La Cima Drive at Crown Point Shores

LOE ID:	77616
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	35
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Three of the 35 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, La Cima Drive at Crown Point Shores.
Temporal Representation:	The samples were collected from June 2009 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49434, Indicator Bacteria**Region 9****Mission Bay Shoreline, La Cima Drive at Crown Point Shores**

LOE ID:	74384
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 35 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Crown Point site.
Temporal Representation:	Samples were collected approximately once a week from June 2009 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49434, Indicator Bacteria**Region 9****Mission Bay Shoreline, La Cima Drive at Crown Point Shores**

LOE ID:	74386
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 35 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not

Objective/Criterion Reference: exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Crown Point site.
Temporal Representation: Samples were collected approximately once a week from June 2009 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49434, Indicator Bacteria
Mission Bay Shoreline, La Cima Drive at Crown Point Shores

Region 9

LOE ID: 74385

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 41
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed BW data for Mission Bay Shoreline, La Cima Drive at Crown Point Shores to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Bay Shoreline, La Cima Drive at Crown Point Shores was collected at 1 monitoring site [Crown Point drain]
Temporal Representation: Data was collected over the time period 6/23/2009-8/24/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at La Jolla Hermosa Park](#)
Water Body ID: CAC9063000020111027141637
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50027	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Hermosa Park		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of six sample exceed the water quality objective for total coliform of a single sample maximum of 230/100ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six sample exceed the water quality objective for total coliform of a single sample maximum of 230/100ml and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50027, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at La Jolla Hermosa Park	

LOE ID:	75208
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at La Jolla Hermosa Park to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at La Jolla Hermosa Park was collected at 1 monitoring site [Bird Rock]
Temporal Representation:	Data was collected over the time period 2/29/2008-1/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Santa Clara Point](#)
Water Body ID: CAC9075100020111027111540
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49431	Region 9
Mission Bay Shoreline, at Santa Clara Point		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 one line(s) of evidence are necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. With the latest data, zero of 22 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With the latest data, zero of 22 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49431, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Santa Clara Point	

LOE ID:	77612
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the twenty-one samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Santa Clara Point at station Mission Bay, Sail Bay (MB-135).
Temporal Representation:	The samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49431, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Santa Clara Point

LOE ID:	74364
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Mission Bay, Sail Bay site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49431, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Santa Clara Point**

LOE ID:	74366
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 20 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Mission Bay, Sail Bay site.
Temporal Representation:	Samples were collected approximately once a week from January 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49431, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Santa Clara Point**

LOE ID:	74365
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Santa Clara Point to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Bay Shoreline, at Santa Clara Point was collected at 1 monitoring site [Santa Clara Pt. East]
Temporal Representation: Data was collected over the time period 04/02/2008-9/23/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49431, Indicator Bacteria
Mission Bay Shoreline, at Santa Clara Point

Region 9

LOE ID: 74363

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 22
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 22 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Mission Bay, Sail Bay site.
Temporal Representation: Samples were collected approximately once a week from January 2008 to September 2008.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Ventura Cove](#)
Water Body ID: CAC9075100020111027112737
Water Body Type: Coastal & Bay Shoreline

DECISION ID 49433

Region 9

Mission Bay Shoreline, at Ventura Cove

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 and 3.3 of the Listing Policy. Under section 3.2 and 3.3, a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. With samples collected in the AB 411 period, zero of the 22 samples exceed the Water Quality Objective for enterococcus of a geomean of 35 cfu/100 ml in a 30-day period.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. With samples collected in the AB 411 period, zero of the 22 samples exceed the Water Quality Objective for enterococcus of a geomean of 35 cfu/100 ml in a 30-day period and this does not exceed the allowable frequency listed in Table 3.2 and under section 3.3 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49433, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Ventura Cove

LOE ID: 74380

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Ventura Cove to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Ventura Cove was collected at 1 monitoring site [Ventura Cove]
Temporal Representation:	Data was collected over the time period 4/2/2008-9/23/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49433, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Ventura Cove

LOE ID:	74381
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ventura Cove site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49433, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Ventura Cove**

LOE ID:	77615
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Zero of the 21 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Ventura Cove.
Temporal Representation:	The samples were collected from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49433, Indicator Bacteria**Region 9****Mission Bay Shoreline, at Ventura Cove**

LOE ID:	74379
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ventura Cove site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49433, Indicator Bacteria
Mission Bay Shoreline, at Ventura Cove

Region 9

LOE ID:	74378
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 22 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Ventura Cove site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Bonita Cove \(eastern shore\)](#)
Water Body ID: CAC9075100020111101114700
Water Body Type: Coastal & Bay Shoreline

DECISION ID	48741	Region 9
Mission Bay Shoreline, at Bonita Cove (eastern shore)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. In LOE 74334, twenty-nine of the 204 samples exceed the Water Quality Objective for enterococci of a geomean of 35 /100 ml.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-nine of 204 samples exceed the Water Quality Objective for enterococci of a geomean of 35 /100 ml and this exceeds the allowable frequency for the AB411 period referred to in Session 3.3 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48741, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Bonita Cove (eastern shore)	

LOE ID:	74334
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	204
Number of Exceedances:	29
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-nine of the 204 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bonita Cove eastern shore site.
Temporal Representation:	Samples were collected approximately once a week from May 3, 2005 to August 31, 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48741, Indicator Bacteria
Mission Bay Shoreline, at Bonita Cove (eastern shore)

Region 9

LOE ID:	74335
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	204
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 204 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bonita Cove eastern shore site.
Temporal Representation:	Samples were collected approximately once a week from May 3, 2005 to August 31, 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Mission Bay Shoreline, at Bonita Cove (eastern shore)

LOE ID:	74336
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	204
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 204 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Bonita Cove eastern shore site.
Temporal Representation:	Samples were collected approximately once a week from May 3, 2005 to August 31, 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Ski Beach at Vacation Isle](#)
Water Body ID: CAC9075200020111027115144
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49432	Region 9
Mission Bay Shoreline, at Ski Beach at Vacation Isle		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Seven of the 62 samples exceed the Water Quality Objective for enterococcus of a geomean of 35 cfu/100 ml in a 30-day period for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 62 samples exceed the Water Quality Objective for enterococcus of a geomean of 35 cfu/100 ml in a 30-day period for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49432, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Ski Beach at Vacation Isle	

LOE ID: 74368
Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 62 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Vacation Isle (MB-203) site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Ski Beach at Vacation Isle

LOE ID:	74369
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	71
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Ski Beach at Vacation Isle to determine beneficial use support and results are as follows: 5 of 71 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Ski Beach at Vacation Isle was collected at 1 monitoring site [Ski Beach]
Temporal Representation:	Data was collected over the time period April 2008 to August 2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 49432, Indicator Bacteria
Mission Bay Shoreline, at Ski Beach at Vacation Isle
Region 9

LOE ID:	74370
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 62 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Vacation Isle (MB-203) site.
Temporal Representation:	Samples were collected approximately once a week from April 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49432, Indicator Bacteria
Mission Bay Shoreline, at Ski Beach at Vacation Isle
Region 9

LOE ID:	77613
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	62
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Ten of the 62 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where

shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected at Mission Bay Shoreline, at Ski Beach at Vacation Isle at station Vacation Isle (MB-203).

Temporal Representation:

The samples were collected from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49432, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Ski Beach at Vacation Isle

LOE ID: 74367

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 62
Number of Exceedances: 7

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Seven of the 62 geomeans exceeded the objective. The samples were collected during dry weather from April through October only. According to the listing Policy section 3.3 a four percent exceedance frequency should be used.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Samples were collected at the Vacation Isle (MB-203) site.

Temporal Representation:

Samples were collected approximately once a week from April 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Enchanted Cove](#)
Water Body ID: CAC9075200020111027134402
Water Body Type: Coastal & Bay Shoreline

DECISION ID 49428

Region 9

Mission Bay Shoreline, at Enchanted Cove

Pollutant: Trash
Final Listing Decision: List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected Attainment Date: 2029
Implementation Action Other than TMDL: Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 5/24/08, 5/23/09, and 5/22/10 for this water body. The total weight of trash (lbs) collected on these dates was 2,064.25. However, using the metric, Coastkeeper classified this water body as severe for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49428, Trash

Region 9

Mission Bay Shoreline, at Enchanted Cove

LOE ID: 74342

Pollutant: Trash
LOE Subgroup: Pollutant-Nuisance
Matrix: Not Recorded
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 5/24/08, 5/23/09, and 5/22/10 for this water body. The total weight of trash (lbs) collected on these dates was 2,064.25. However, using the metric, Coastkeeper classified this water body as severe for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Fiesta Island - Mission Bay.
Temporal Representation:	Three cleanups occurred on 5/24/08, 5/23/09, and 5/22/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue](#)
Water Body ID: CAC9111100020111027092832
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50041	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data of 2008 to 2010 shows that 10 of 18 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period, and 9 of 38 exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data of 2008 to 2010 shows that 10 of 18 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period, and 9 of 38 exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50041, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue	

LOE ID: 77690
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	18
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eighteen of the ten samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue.
Temporal Representation:	The samples were collected from January 2008 to June 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50041, Indicator Bacteria
Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue

Region 9

LOE ID:	75080
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	38
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue to determine beneficial use support and results are as follows: 9 of 38 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue

Temporal Representation:	was collected at 1 monitoring site [Cortez Ave]
Environmental Conditions:	Data was collected over the time period 1/10/2008-6/3/2010.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 50041, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue	

LOE ID:	75079
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 18 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Cortez Avenue site.
Temporal Representation:	Samples were collected from January 2008 to June 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50041, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue	

LOE ID:	75078
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four eight of the 18 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Cortez Avenue site.
Temporal Representation:	Samples were collected from January 2008 to June 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50041, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue	

LOE ID:	75124
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 18 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Cortez Avenue site.
Temporal Representation:	Samples were collected from January 2008 to June 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Dieguito Lagoon, Lower Basin](#)
Water Body ID: CAE9051100020111216092905
Water Body Type: Estuary

DECISION ID	49055	Region 9
San Dieguito Lagoon, Lower Basin		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 3 samples exceeded the Objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 49055, Toxicity	Region 9
San Dieguito Lagoon, Lower Basin	

LOE ID:	72836
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Three samples were collected to test for toxicity. Zero of the three samples exhibited statistically significant toxicity. The toxicity tests included survival of <i>Eohaustorius estuarius</i> . Each sample is a sediment composite from three different sites.
Data Reference:	Data for Various Pollutants from Ambient Bay and Lagoon, 2003-2005.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	The the composite samples were 907SDL_2003, samples collected at sites 905_SDL1L1_2003, 905_SDL2L1_2003, and 905_SDL2M1_2003. Composite 907SDL_2004 samples were collected 905_SDL2M1_2004, 905_SDL2R1_2004 and 905_SDL3R1_2004. Composite 907SDL_2005 samples were collected at sites, 905_SDL2M1_2005, 905_SDL2L1_2005, and 905_SDL2R4_2005.
Temporal Representation:	The samples were collected in 2003, 2004, and 2005.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego Ambient Bay and Lagoon Monitoring Project 2003-2005. Annual Report for the Receiving Waters and Urban Runoff Monitoring section covered under the San Diego County Municipal National Pollutant Discharge
QAPP Information Reference(s):	Quality Assurance Project Plan from Enviromatrix Analytical Rev. 18.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Tijeras Canyon](#)
Water Body ID: CAR9012000020110512160100
Water Body Type: River & Stream

DECISION ID	52043	Region 9
Tijeras Canyon		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the criterion or guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52043, Ammonia	Region 9
Tijeras Canyon	

LOE ID: 76829
Pollutant: Ammonia (Unionized)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample did not have a detectable amount of ammonia. No corresponding pH or temperature data were available to calculate or estimate an ammonia objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The San Diego Basin Plan objective for unionized ammonia is 0.025 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at station SMC00873.
Temporal Representation:	The sample was collected on 5/18/09.
Environmental Conditions:	
QAPP Information:	A signed QAPP was included with the stated goal of ensuring the consistent collection of accurate water quality information that will be used to satisfy the objectives of the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID		50500	Region 9
Tijeras Canyon			
Pollutant:	Arsenic		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	New Decision		
Revision Status	Revised		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 		
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.		

Tijeras Canyon

LOE ID:	76817
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The sample did not exceed the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for arsenic is 150 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	The sample is representative of dry weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID

51765

Region 9

Tijeras Canyon

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51765, Benthic Community Effects

Region 9

Tijeras Canyon

LOE ID:	80744
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was collected at one station in Tijeras Creek. The CSCI score was below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.

Spatial Representation:	The sample was collected at SMC00873
Temporal Representation:	The sample was collected in 2009
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008 Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

DECISION ID	50501	Region 9
Tijeras Canyon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50501, Cadmium	Region 9
Tijeras Canyon	

LOE ID:	76818
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The sample did not exceed the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	The sample is representative of dry weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50517	Region 9
Tijeras Canyon		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50517, Chlorpyrifos
Tijeras Canyon**

Region 9

LOE ID:	76819
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	This sample did not exceed the continuous concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Criteria Continuous Concentration (four day average) for chlorpyrifos in freshwater is 14.0 ng/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

**DECISION ID 50502
Tijeras Canyon**

Region 9

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50502, Chromium

Region 9

Tijeras Canyon

LOE ID:	76822
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The sample did not exceed the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	The sample is representative of dry weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality

QAPP Information Reference(s):

DECISION ID	50503	Region 9
Tijeras Canyon		

Pollutant: Copper
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50503, Copper	Region 9
Tijeras Canyon	

LOE ID: 76823
Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 0
Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: The sample did not exceed the objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)
SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	The sample is representative of dry weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50522	Region 9
Tijeras Canyon		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50522, Diazinon	Region 9
Tijeras Canyon	

LOE ID:	76824
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	One sample did not exceed the continuous concentration for Diazinon criteria of 0.1 ug/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	This samples was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	This sample was collected in May of 2009.
Environmental Conditions:	
QAPP Information:	Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.
QAPP Information Reference(s):	

DECISION ID		50504	Region 9
Tijeras Canyon			
Pollutant:	Lead		
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)		
Last Listing Cycle's Final Listing Decision:	New Decision		
Revision Status	Revised		
Impairment from Pollutant or Pollution:	Pollutant		
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with 		

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50504, Lead

Region 9

Tijeras Canyon

LOE ID: 76825

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: The sample did not exceed the objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation: This sample was collected at Tijeras Creek, site SMC00873.

Temporal Representation: Sample was collected in May 2009.

Environmental Conditions: The sample is representative of dry weather.

QAPP Information: Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

DECISION ID 50523

Region 9

Tijeras Canyon

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50523, Malathion
Tijeras Canyon

Region 9

LOE ID:	76826
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	This sample did not exceed the maximum (Instantaneous) concentration for Malathion in freshwater of 100 ng/L.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The maximum (Instantaneous) concentration for Malathion in freshwater is 100 ng/L.
Guideline Reference:	Quality Criteria for Water. USEPA Office of Water and Hazardous Materials. Washington, D.C
Spatial Representation:	Sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	

QAPP Information:

Data were submitted with the County of Orange Stormwater Program Quality Assurance Management Plan (QAMP) dated January 2010. However, data were collected prior to the development of this QAMP, therefore the quality of these data are unknown.

QAPP Information Reference(s):

DECISION ID	50506	Region 9
Tijeras Canyon		

Pollutant: Nickel
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50506, Nickel	Region 9
Tijeras Canyon	

LOE ID: 76828

Pollutant: Nickel
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality: The sample did not exceed the objective.
Data Reference: [Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	The sample is representative of dry weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50507	Region 9
Tijeras Canyon		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50507, Selenium	Region 9
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Tijeras Canyon

LOE ID:	76830
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The sample did not exceed the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The CTR for selenium is 5.0 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	The sample is representative of dry weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

DECISION ID	50509	Region 9
Tijeras Canyon		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50509, Silver Tijeras Canyon

Region 9

LOE ID:	76831
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The sample did not exceed the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion maximum concentrations for silver to protect aquatic life in freshwater (1-hour average). The dissolved silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	This sample was collected at Tijeras Creek, site SMC00873.
Temporal Representation:	Sample was collected in May 2009.
Environmental Conditions:	The sample is representative of dry weather.
QAPP Information:	Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.
QAPP Information Reference(s):	

**DECISION ID 50510
Tijeras Canyon**

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50510, Zinc	Region 9
Tijeras Canyon	

LOE ID:	76832
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	The sample did not exceed the objective.
Data Reference:	Data for Various Waterbodies in Region 8 and Region 9, 2006-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to

protect aquatic life in freshwater. The dissolved criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.

Guideline Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Spatial Representation:

This sample was collected at Tijeras Creek, site SMC00873.

Temporal Representation:

Sample was collected in May 2009.

Environmental Conditions:

The sample is representative of dry weather.

QAPP Information:

Samples were collected and analyzed in accordance with the signed and certified, Quality Assurance Management Plan for the Orange County Stormwater Program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Hot Spring Canyon Creek \(Orange County\)](#)
Water Body ID: CAR9012000020110828152507
Water Body Type: River & Stream

DECISION ID 47840 **Region 9**
Hot Spring Canyon Creek (Orange County)

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Alkalinity, Carbonate as CaCO₃.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Alkalinity, Carbonate as CaCO₃ and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47840, Alkalinity as CaCO₃ **Region 9**
Hot Spring Canyon Creek (Orange County)

LOE ID: 73851
Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47841	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Aluminum
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Aluminum.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the Water Quality Criteria for Aluminum and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47841, Aluminum
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID: 73853

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.

Guideline Reference: [National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology](#)

Spatial Representation: Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]

Temporal Representation: Data was collected on a single day 5/14/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

**DECISION ID 47842
Hot Spring Canyon Creek (Orange County)**

Region 9

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Arsenic.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for Arsenic and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47842, Arsenic
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73857
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Hot Spring Canyon Creek (Orange County)

LOE ID:	73859
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID

47843

Region 9

Hot Spring Canyon Creek (Orange County)

Pollutant:	Benthic Community Effects
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

**Line of Evidence (LOE) for Decision ID 47843, Benthic Community Effects
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	80745
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following station: 901S01705-Hot Spring Canyon Creek

Temporal Representation: ~1.2mi above Hwy 74
 Environmental Conditions: Surveys done May 14, 2009.
 QAPP Information: Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
 QAPP Information Reference(s): [RWB9 Stormwater Monitoring Council CY 2009](#)

Line of Evidence (LOE) for Decision ID 47843, Benthic Community Effects **Region 9**
Hot Spring Canyon Creek (Orange County)

LOE ID: 73860

Pollutant: Benthic-Macroinvertebrate Bioassessments
 LOE Subgroup: Population/Community Degradation
 Matrix: Water
 Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
 Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
 Data Used to Assess Water Quality: The IBI score for this water body was 47 which indicates that this water body is not considered to have impaired conditions.
 Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
 Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
 Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 \(2005\): pp. 1-13](#)

Spatial Representation: Samples were collected at the following station: 901S01705-Hot Spring Canyon Creek ~1.2mi above Hwy 74
 Temporal Representation: Surveys done May 14, 2009.
 Environmental Conditions:
 QAPP Information: Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
 QAPP Information Reference(s):

DECISION ID 47844 **Region 9**
Hot Spring Canyon Creek (Orange County)

Pollutant: Bifenthrin
 Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
 Last Listing Cycle's Final Listing Decision: New Decision
 Revision Status: Revised
 Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Bifenthrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the Water Quality Criteria for Bifenthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 47844, Bifenthrin
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73862
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:
QAPP Information Reference(s):

The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47845	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47845, Cadmium	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73864
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47845, Cadmium

Region 9

Hot Spring Canyon Creek (Orange County)

LOE ID:	73865
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47846
Hot Spring Canyon Creek (Orange County)

Region 9

Pollutant: Chloride
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Chloride.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Chloride and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47846, Chloride
Hot Spring Canyon Creek (Orange County)

Region 9

LOE ID: 73867

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Hot Spring Canyon Creek (Orange County) within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47846, Chloride	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73868
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Hot Spring Canyon Creek (Orange County) within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47847	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Chromium
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Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Chromium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for Chromium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47847, Chromium
Hot Spring Canyon Creek (Orange County)

Region 9

LOE ID: 73872

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in

freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]

Temporal Representation:

Data was collected on a single day 5/14/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47847, Chromium

Region 9

Hot Spring Canyon Creek (Orange County)

LOE ID: 73871

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]

Temporal Representation:

Data was collected on a single day 5/14/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):

[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 47847, Chromium

Region 9

Hot Spring Canyon Creek (Orange County)

LOE ID:	73870
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47847, Chromium

Region 9

Hot Spring Canyon Creek (Orange County)

LOE ID:	73869
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47848	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the California Toxics Rule Objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47848, Copper	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73876
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47848, Copper
Hot Spring Canyon Creek (Orange County)

Region 9

LOE ID:	73874
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47849	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Cyfluthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Cyfluthrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Water Quality Criteria for Cyfluthrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47849, Cyfluthrin	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73878
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47850	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Cyhalothrin, Lambda
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Cyhalothrin, Lambda.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the Water Quality Criteria for Cyhalothrin, Lambda and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is

fully supported using table 3.1.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47850, Cyhalothrin, Lambda
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73880
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47851

Region 9

Hot Spring Canyon Creek (Orange County)

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Cypermethrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the Water Quality Criteria for Cypermethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 47851, Cypermethrin
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73882
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of one sample result was not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected

Temporal Representation:	at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Environmental Conditions:	Data was collected on a single day 5/14/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed. Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47852	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Deltamethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the water quality criteria for Deltamethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Water Quality Criteria for Delthamethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47852, Deltamethrin	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73884
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to

Data Reference:	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47853	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Esfenvalerate/Fenvalerate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Water Quality Criteria for Esfenvalerate/Fenvalerate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47853, Esfenvalerate/Fenvalerate	Region 9
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Hot Spring Canyon Creek (Orange County)

LOE ID:	73886
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47854	Region 9
Hot Spring Canyon Creek (Orange County)		
Pollutant:	Fenpropathrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Fenpropathrin.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.	

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Water Quality Criteria for Fenpropathrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47854, Fenpropathrin
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73888
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 47855
Hot Spring Canyon Creek (Orange County)**

Region 9

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Basin Plan Objective for Iron.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Basin Plan Objective for Iron and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47855, Iron
Hot Spring Canyon Creek (Orange County)

Region 9

LOE ID: 73890

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Iron.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Hot Spring Canyon Creek (Orange County) within the San Juan Hydrologic Unit is 0.3 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47856	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the California Toxics Rule Objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47856, Lead		Region 9
Hot Spring Canyon Creek (Orange County)		

LOE ID:	73894
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47856, Lead
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73892
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:
QAPP Information Reference(s):

The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47857	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Site Specific Objective for Manganese in the Hot Spring Canyon Creek (Orange County).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Site Specific Objective for Manganese in the Hot Spring Canyon Creek (Orange County), and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47857, Manganese	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73896
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Manganese.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Hot Spring Canyon Creek (Orange County) within the San Juan Hydrologic Unit is 0.05 mg/L.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]

Temporal Representation: Data was collected on a single day 5/14/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47858	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant: Nickel

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Nickel.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for Nickel and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47858, Nickel	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73900
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47858, Nickel
Hot Spring Canyon Creek (Orange County)

Region 9

LOE ID:	73898
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47911	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Water Quality Criteria for Nitrogen.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Water Quality Criteria for Nitrogen and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47911, Nitrogen, ammonia (Total Ammonia)	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73855
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia â€™ Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47859	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the One samples exceed the Basin Plan Objective for Oxygen, Dissolved.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of One samples exceeded the Oxygen, Dissolved and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using

table 3.2.

4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47859, Oxygen, Dissolved
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73902
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 47859, Oxygen, Dissolved
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73901
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Warm Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for warm water habitats shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47860	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Water Quality Criteria for Permethrin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Water Quality Criteria for Permethrin and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the
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**Line of Evidence (LOE) for Decision ID 47860, Permethrin, total
Hot Spring Canyon Creek (Orange County)**
Region 9

LOE ID:	73831
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 47861
Hot Spring Canyon Creek (Orange County)**
Region 9

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the California Toxics Rule Objective for Selenium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for Selenium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47861, Selenium
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73835
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 47862
Hot Spring Canyon Creek (Orange County)**

Region 9

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the California Toxics Rule Objective for Silver.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the California Toxics Rule Objective for Silver and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47862, Silver Hot Spring Canyon Creek (Orange County)

Region 9

LOE ID:	73837
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]

Temporal Representation: Data was collected on a single day 5/14/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	47863	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Site Specific Objective for Sulfates in Hot Springs Canyon Creek (Orange County).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Site Specific Objective for Sulfates in Hot Springs Canyon Creek (Orange County) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47863, Sulfates	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID: 73839

Pollutant: Sulfates
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Hot Spring Canyon Creek (Orange County) within the San Juan Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47864	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Temperature, water
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Basin Plan Objective for Temperature, water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Basin Plan Objective for Temperature, water and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47864, Temperature, water
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73840
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 47865
Hot Spring Canyon Creek (Orange County)**

Region 9

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Total Dissolved Solids.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Basin Plan Objective for Total Dissolved Solids and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47865, Total Dissolved Solids
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73842
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Hot Spring Canyon Creek (Orange County) within the San Juan Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pollutant: Toxicity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the One samples exceed the exhibited water toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exhibited water toxicity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48920, Toxicity
Hot Spring Canyon Creek (Orange County)

LOE ID: 73843
Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1
Number of Exceedances: 1
Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 901S01705.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	47866	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the Basin Plan Objective for Turbidity and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47866, Turbidity	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73845
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Hot Spring Canyon Creek (Orange County) within the San Juan Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47867		Region 9
Hot Spring Canyon Creek (Orange County)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary and under section 3.6 at least two lines of evidence are necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the California Toxics Rule Objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of one samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47867, Zinc	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73847
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47867, Zinc	Region 9
Hot Spring Canyon Creek (Orange County)	

LOE ID:	73849
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47868	Region 9
Hot Spring Canyon Creek (Orange County)		

Pollutant:	pH
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the Basin Plan Objective for pH.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the Basin Plan Objective for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47868, pH
Hot Spring Canyon Creek (Orange County)**

Region 9

LOE ID:	73833
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hot Spring Canyon Creek (Orange County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Spring Canyon Creek (Orange County) was collected at 1 monitoring site [Hot Spring Canyon Creek ~1.2mi above Hwy 74 - 901S01705]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Adobe Creek \(Riverside County\)](#)
Water Body ID: CAR9022100020110825104941
Water Body Type: River & Stream

DECISION ID	48723	Region 9
Adobe Creek (Riverside County)		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 48723, Benthic Community Effects	Region 9
Adobe Creek (Riverside County)	

LOE ID: 72848
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 49 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 902SMADO2 (Adobe Creek 2).
Temporal Representation:	Survey done June 5, 2007.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48723, Benthic Community Effects

Region 9

Adobe Creek (Riverside County)

LOE ID:	79429
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in

a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference:

[The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation:

Samples were collected at the following station: 902SMADO2 (Adobe Creek 2).

Temporal Representation:

Survey done June 5, 2007.

Environmental Conditions:

QAPP Information:

Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.

QAPP Information Reference(s):

[RWB9 Status Sampling 2007 and 2008](#)

DECISION ID	48715	Region 9
Adobe Creek (Riverside County)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the single sample objective for enterococcus. Zero of two samples exceed the single sample objectives for fecal and total coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceed the singles sample objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48715, Indicator Bacteria	Region 9
Adobe Creek (Riverside County)	

LOE ID: 72775

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the two samples exceeded the total coliform objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Basin Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The total coliform concentration shall not exceed more than 10000/100 ml. Guidance for Fresh Water Beaches (CDPH).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	The samples were collected at Adobe Creek.
Temporal Representation:	Samples were collected on Oct 22, 2008 and May 21, 2009.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48715, Indicator Bacteria
Adobe Creek (Riverside County)

Region 9

LOE ID:	72773
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the two samples exceeded the E. Coli objective.
Data Reference:	Data for Various Pollutants in Riverside County, 2007-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The E. coli concentration shall not exceed more than 235/100 ml. USEPA Ambient Water Quality Criteria for Bacteria - 1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Adobe Creek.
Temporal Representation:	Samples were collected on Oct 22, 2008 and May 21, 2009.

Environmental Conditions:

QAPP Information:

No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48715, Indicator Bacteria

Region 9

Adobe Creek (Riverside County)

LOE ID: 72774

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the two samples exceeded the fecal coliform objective.
Data Reference: [Data for Various Pollutants in Riverside County, 2007-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Fecal Coliform concentration shall not exceed more than 400/100 ml. Water Quality Control Plan for The San Diego Basin.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Adobe Creek.
Temporal Representation: Samples were collected on Oct 22, 2008 and May 21, 2009.

Environmental Conditions:

QAPP Information:

No QAPP was submitted. Sampling was done by municipalities in Riverside County pursuant to the Riverside County Municipal Stormwater Permit.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Stone Creek \(San Diego County\)](#)
Water Body ID: CAR9022200020110820082651
Water Body Type: River & Stream

DECISION ID 51747 **Region 9**
Stone Creek (San Diego County)

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollution

Regional Board Conclusion:

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 51747, Benthic Community Effects **Region 9**
Stone Creek (San Diego County)

LOE ID: 76948

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: All of the IBI scores for this water body were above 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference: [RWB9 Status Sampling 2007 and 2008](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.

Guideline Reference: [A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams.](#)

Spatial Representation: Samples were collected at the following station: 902SMSTN1-Stone Creek 1.
Temporal Representation: Surveys done June 5, 2007 and May 6, 2008.
Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51747, Benthic Community Effects
Stone Creek (San Diego County)

Region 9

LOE ID: 79477

Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: Benthic macroinvertebrate surveys
Data Used to Assess Water Quality: The CSCI scores for this site are above the 0.79 threshold, and therefore the site is not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference: [RWB9 Status Sampling 2007 and 2008](#)
[Region 9 CSCI Scores & Water Body Information](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference: [The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation: Samples were collected at the following station: 902SMSTN1-Stone Creek 1.
Temporal Representation: Surveys done June 5, 2007 and May 6, 2008.
Environmental Conditions:
QAPP Information: Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [East Channel Creek](#)
Water Body ID: CAR9031100020110812103625
Water Body Type: River & Stream

DECISION ID	48412	Region 9
East Channel Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48412, Cadmium	Region 9
East Channel Creek	

LOE ID: 73504

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for East Channel Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]
Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48421	Region 9
East Channel Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48421, Chlorpyrifos

Region 9

East Channel Creek

LOE ID: 73505

Pollutant: Chlorpyrifos
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for East Channel Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).

Guideline Reference: [Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]

Temporal Representation: Data was collected over the time period 9/29/2005-5/28/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

48413

Region 9

East Channel Creek

Pollutant: Copper

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48413, Copper East Channel Creek

Region 9

LOE ID:	73506
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for East Channel Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]

Temporal Representation:	Data was collected 6/3/2003 - 5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48422	Region 9
East Channel Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48422, Diazinon		Region 9
East Channel Creek		

LOE ID:	73507
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for East Channel Creek to determine

	beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]
Temporal Representation:	Data was collected over the time period 9/29/2005-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48416	Region 9
East Channel Creek		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 48416, Lead
East Channel Creek**

Region 9

LOE ID: 73510

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for East Channel Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]

Temporal Representation: Data was collected 6/3/2003 - 5/28/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 48423

Region 9

East Channel Creek

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48423, Malathion
East Channel Creek**

Region 9

LOE ID:	73511
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for East Channel Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]
Temporal Representation:	Data was collected over the time period 9/29/2005-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48426, Zinc	Region 9
East Channel Creek	

LOE ID:	73513
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for East Channel Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life

in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]

Temporal Representation:

Data was collected 6/3/2003 - 5/28/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48425	Region 9
East Channel Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 7 of 7 single samples exceed the water quality objective for enterococcus of a SSM of 61/100ml in fresh water for the protection of REC-1 beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Data from 2003 to 2009 show that 7 of 7 single samples exceed the water quality objective for enterococcus of a SSM of 61/100ml in fresh water for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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Line of Evidence (LOE) for Decision ID 48425, Indicator Bacteria	Region 9
East Channel Creek	

LOE ID:	73512
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for East Channel Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48425, Indicator Bacteria
East Channel Creek

Region 9

LOE ID:	73509
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for East Channel Creek to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48425, Indicator Bacteria

Region 9

East Channel Creek

LOE ID:	73508
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for East Channel Creek to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for East Channel Creek was collected at 1 monitoring site [East Channel Creek @ Hutchinson Street and Hidden Lake Lane]
Temporal Representation:	Data was collected over the time period 6/3/2003-5/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Green Canyon Creek](#)
Water Body ID: CAR9031200020110809151245
Water Body Type: River & Stream

DECISION ID	47412	Region 9
Green Canyon Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 14 samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47412, Cadmium	Region 9
Green Canyon Creek	

LOE ID: 73755
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Green Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Green Canyon Creek @ Sycamore Drive, Ostrich Farm Creek at Highway 76]
Temporal Representation:	Data was collected 6/2/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47413	Region 9
Green Canyon Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the Water Quality Criteria fro Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47413, Chlorpyrifos
Green Canyon Creek**

Region 9

LOE ID:	73756
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Canyon Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Green Canyon Creek @ Sycamore Drive, Ostrich Farm Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 9/29/2005-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 47414
Green Canyon Creek**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 14 samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47414, Copper
Green Canyon Creek****Region 9**

LOE ID: 73757

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Green Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Green Canyon Creek @ Sycamore Drive, Ostrich Farm Creek at Highway 76]
Temporal Representation:	Data was collected 6/2/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47415	Region 9
Green Canyon Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the Evaluation Guideline for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 9 samples exceeded the Evaluation Guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47415, Diazinon		Region 9
Green Canyon Creek		

LOE ID:	73758
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Canyon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Green Canyon Creek @ Sycamore Drive, Ostrich Farm Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 9/29/2005-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47418	Region 9
Green Canyon Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 14 samples exceeded the California Toxics Rule for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47418, Lead
Green Canyon Creek**

Region 9

LOE ID:	73761
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Green Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Green Canyon Creek @ Sycamore Drive, Ostrich Farm Creek at Highway 76]
Temporal Representation:	Data was collected 6/2/2003 - 6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 47419
Green Canyon Creek**

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of nine samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47419, Malathion Green Canyon Creek

Region 9

LOE ID:	73762
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Canyon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Green Canyon Creek @ Sycamore Drive, Ostrich Farm Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 9/29/2005-6/9/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47423	Region 9
Green Canyon Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the California Toxics Rule Objective for zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 14 samples exceeded the California Toxics Rule Objective for zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47423, Zinc	Region 9
Green Canyon Creek	

LOE ID:	73764
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Green Canyon Creek to

	determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Ostrich Farm Creek at Highway 76, Green Canyon Creek @ Sycamore Drive]
Temporal Representation:	Data was collected over the time period 6/2/2003-6/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47416	Region 9
Green Canyon Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Eighteen of the 18 samples exceed the Single Sample Maximum Objective for Enterococcus, Ten out of 18 samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Five out of 18 samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of the 18 samples exceed the Single Sample Maximum Objective for Enterococcus, Ten out of 18 samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Five out of 18 samples exceeded the Single Sample Maximum Guideline for Total Coliform, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 47416, Indicator Bacteria
Green Canyon Creek**

Region 9

LOE ID:	73760
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Canyon Creek to determine beneficial use support and results are as follows: 10 of 18 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Ostrich Farm Creek at Highway 76, Green Canyon Creek @ Sycamore Drive]
Temporal Representation:	Data was collected over the time period 6/2/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 47416, Indicator Bacteria
Green Canyon Creek**

Region 9

LOE ID:	73759
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	18

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Canyon Creek to determine beneficial use support and results are as follows: 18 of 18 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Ostrich Farm Creek at Highway 76, Green Canyon Creek @ Sycamore Drive]
Temporal Representation:	Data was collected over the time period 6/2/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47416, Indicator Bacteria

Region 9

Green Canyon Creek

LOE ID:	73763
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Green Canyon Creek to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Green Canyon Creek was collected at 2 monitoring sites [Ostrich Farm Creek at Highway 76, Green Canyon Creek @ Sycamore Drive]
Temporal Representation:	Data was collected over the time period 6/2/2003-6/9/2009.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Live Oak Creek \(San Diego County\)](#)
Water Body ID: CAR9031200020110809154741
Water Body Type: River & Stream

DECISION ID	48186	Region 9
Live Oak Creek (San Diego County)		

Pollutant: Benthic-Macroinvertebrate Bioassessments
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One lines of evidence is/are available in the administrative record to assess this indicator. One of One samples exceeded the Evaluation Guideline for Benthic Community Effects.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of One samples exceeded the Index of Biological Integrity (IBI) value of ?poor? water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 2 samples is needed to determine impairment using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48186, Benthic-Macroinvertebrate Bioassessments	Region 9
Live Oak Creek (San Diego County)	

LOE ID: 74132
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body is 26 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 903SLGRD2 (Gird Creek 2 at Oak Cliff Drive).
Temporal Representation:	Surveys done May 9, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

DECISION ID	48187	Region 9
Live Oak Creek (San Diego County)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Twelve samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Twelve samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48187, Cadmium
Live Oak Creek (San Diego County)**

Region 9

LOE ID:	74133
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected July 2003 - June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 48188
Live Oak Creek (San Diego County)**

Region 9

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 48188, Chlorpyrifos
Live Oak Creek (San Diego County)**

Region 9

LOE ID:	74134
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 9/29/2005-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48190	Region 9
Live Oak Creek (San Diego County)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Twelve samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Twelve samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48190, Copper		Region 9
Live Oak Creek (San Diego County)		

LOE ID:	74135
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected July 2003 - June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48191	Region 9
Live Oak Creek (San Diego County)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Nine samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48191, Diazinon
Live Oak Creek (San Diego County)**

Region 9

LOE ID: 74136

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 9
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]

Temporal Representation: Data was collected over the time period 9/29/2005-6/9/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

**DECISION ID 48194
Live Oak Creek (San Diego County)**

Region 9

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. One of the Twelve samples exceed the California Toxics Rule Objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Twelve samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48194, Lead
Live Oak Creek (San Diego County)**

Region 9

LOE ID:	74139
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected July 2003 - June 2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48196	Region 9
Live Oak Creek (San Diego County)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Nine samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Nine samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48196, Malathion		Region 9
Live Oak Creek (San Diego County)		

LOE ID:	74140
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Live Oak Creek (San Diego)

Data Reference:	County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Malathion. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 9/29/2005-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 48199		Region 9
Live Oak Creek (San Diego County)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Twelve samples exceed the California Toxics Rule Objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Twelve samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

**Line of Evidence (LOE) for Decision ID 48199, Zinc
Live Oak Creek (San Diego County)**

Region 9

LOE ID:	74142
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected July 2003 - June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 48192
Live Oak Creek (San Diego County)**

Region 9

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Twelve of the Twelve samples exceed the Single Sample Maximum Objective for Enterococcus, Five out of Twelve samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Six out of Twelve samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the Twelve samples exceed the Single Sample Maximum Objective for Enterococcus, Five out of Twelve samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Six out of Twelve samples exceeded the Single Sample Maximum Guideline for Total Coliform and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48192, Indicator Bacteria
Live Oak Creek (San Diego County)**

Region 9

LOE ID:	74137
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 7/1/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

Line of Evidence (LOE) for Decision ID 48192, Indicator Bacteria
Live Oak Creek (San Diego County)

Region 9

LOE ID:	74141
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 7/1/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48192, Indicator Bacteria
Live Oak Creek (San Diego County)

Region 9

LOE ID:	74138
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Live Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Live Oak Creek (San Diego County) was collected at 2 monitoring sites [Live Oak Creek @ Oak Cliff Drive, Live Oak Creek at Highway 76]
Temporal Representation:	Data was collected over the time period 7/1/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Moosa Canyon, South Fork](#)
Water Body ID: CAR9031300020110812104345
Water Body Type: River & Stream

DECISION ID 48124 **Region 9**
Moosa Canyon, South Fork

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION for protection of the Aquatic Life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48124, Cadmium **Region 9**
Moosa Canyon, South Fork

LOE ID: 74408
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 8

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395), Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838)]
Temporal Representation:	Data was collected in 2003, 2004, 2006, 2007, and 2009
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48119	Region 9
Moosa Canyon, South Fork		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the CRITERION for protection of the Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48119, Chlorpyrifos
Moosa Canyon, South Fork**

Region 9

LOE ID:	74409
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838), Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395)]
Temporal Representation:	Data was collected over the time period 6/12/2006-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 48126
Moosa Canyon, South Fork**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION for protection of the Aquatic Life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48126, Copper**Region 9****Moosa Canyon, South Fork**

LOE ID: 74410

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395), Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838)]
Temporal Representation:	Data was collected in 2003, 2004, 2006, 2007, and 2009
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48120	Region 9
Moosa Canyon, South Fork		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the Aquatic Life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48120, Diazinon		Region 9
Moosa Canyon, South Fork		

LOE ID:	74411
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838), Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395)]
Temporal Representation:	Data was collected over the time period 6/12/2006-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48128	Region 9
Moosa Canyon, South Fork		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION for protection of the Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 8 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48128, Lead
Moosa Canyon, South Fork**

Region 9

LOE ID: 74414

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395), Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838)]

Temporal Representation: Data was collected in 2003, 2004, 2006, 2007, and 2009

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

**DECISION ID 48122
Moosa Canyon, South Fork**

Region 9

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the Aquatic Life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 48122, Malathion
Moosa Canyon, South Fork**

Region 9

LOE ID:	74415
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838), Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395)]
Temporal Representation:	Data was collected over the time period 6/12/2006-6/9/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48131	Region 9
Moosa Canyon, South Fork		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the CRITERION for protection of the Aquatic Life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 8 samples exceeded the CRITERIA for aquatic life which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48131, Zinc		Region 9
Moosa Canyon, South Fork		

LOE ID:	74417
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

Data Reference:	<p>criterion for Zinc.</p> Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395), Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838)]
Temporal Representation:	Data was collected in 2003, 2004, 2006, 2007, and 2009
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48134	Region 9
Moosa Canyon, South Fork		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the eight samples exceed the objective for enterococcus. Six of eight samples exceed the objective for fecal coliform and one of eight samples exceed the objective for total coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of eight and six of eight samples exceed the objectives and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

Line of Evidence (LOE) for Decision ID 48134, Indicator Bacteria

Region 9

Moosa Canyon, South Fork

LOE ID:	74412
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395), Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838)]
Temporal Representation:	Data was collected over the time period 5/15/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48134, Indicator Bacteria

Region 9

Moosa Canyon, South Fork

LOE ID:	74413
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon, South Fork to

Data Reference:	determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Coliform, Fecal. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395), Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838)]
Temporal Representation:	Data was collected over the time period 5/15/2003-6/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48134, Indicator Bacteria
Moosa Canyon, South Fork

Region 9

LOE ID:	74416
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Moosa Canyon, South Fork to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxicsubstances in concentrations which are toxic to,or which produce detrimental physiologicalresponses in human, plant, animal, or indigenoussaquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Moosa Canyon, South Fork was collected at 2 monitoring sites [Old 395 Creek @ 29013 Champagne Blvd. (Old Hwy 395), Old 395 Creek @ Old Hwy 395 (below outfall pipe next to pole # P719838)]
Temporal Representation:	Data was collected over the time period 5/15/2003-6/9/2009.

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Gomez Creek](#)
Water Body ID: CAR9032100020110302003234
Water Body Type: River & Stream

DECISION ID	47400	Region 9
Gomez Creek		

Pollutant: Temperature, water
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One lines of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the Evaluation Guideline for temperature, water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of eight samples exceeded the Evaluation Guideline for temperature, water and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47400, Temperature, water	Region 9
Gomez Creek	

LOE ID: 73774
Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 8 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Â°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Evaluation Guideline: Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Fish introductions in CA: History and impact on native fishes. Davis, CA: University of CA. Davis
Spatial Representation:	Samples were collected at station SLR-070 (Gomez Creek from Rice Canyon).
Temporal Representation:	Samples were collected between February, 2009 and July, 2010.
Environmental Conditions:	
QAPP Information:	San Diego Regional Water Quality Assessment and Outreach Project Quality Assurance Project Plan Prepared by: Clay Clifton (San Diego Coastkeeper, Local Project Sponsor Manager), Bob Stafford (San Diego Stream Team), Dr. Rick Gersberg (San Diego State University), Bryan Bjorndal (Assure Controls, Inc.), and Morgan Justice-Black (I Love A Clean San Diego).
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Couser Canyon Creek](#)
Water Body ID: CAR9032100020110812102801
Water Body Type: River & Stream

DECISION ID	48351	Region 9
Couser Canyon Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 6 samples exceed the criteria for COLD and 0 of 6 samples exceed the criteria for MUN.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 6 samples exceed the criteria for COLD and 0 of 6 samples exceed the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table ____.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48351, Cadmium	Region 9
Couser Canyon Creek	

LOE ID: 73408
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 48351, Cadmium
Couser Canyon Creek**

Region 9

LOE ID:	73409
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48359	Region 9
Couser Canyon Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria for COLD and 0 of 5 samples exceed the criteria for MUN.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceed the criteria for COLD and 0 of 5 samples exceed the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48359, Chlorpyrifos		Region 9
Couser Canyon Creek		

LOE ID:	73410
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48359, Chlorpyrifos
Couser Canyon Creek

Region 9

LOE ID:	78012
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Âµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation: Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]

Temporal Representation: Data was collected over the time period 8/10/2004-6/8/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48360	Region 9
Couser Canyon Creek		

Pollutant: Copper

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 7 samples exceed the criteria for COLD and 0 of 7 samples exceed the criteria for MUN.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceed the criteria for COLD and 0 of 7 samples exceed the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48360, Copper	Region 9
Couser Canyon Creek	

LOE ID: 73417

Pollutant: Copper

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48360, Copper

Region 9

Couser Canyon Creek

LOE ID:	73418
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [

Temporal Representation:	Couser Canyon Creek @ Couser Canyon Road]
Environmental Conditions:	Data was collected over the time period 5/24/2004-6/8/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48361	Region 9
Couser Canyon Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria for COLD and 0 of 5 samples exceed the criteria for MUN.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria for COLD and 0 of 5 samples exceed the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48361, Diazinon		Region 9
Couser Canyon Creek		

LOE ID:	73419
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48361, Diazinon
Couser Canyon Creek

Region 9

LOE ID:	78013
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]

Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48352	Region 9
Couser Canyon Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 6 samples exceed the criteria for COLD and 0 of 6 samples exceed the criteria for MUN.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 6 samples exceed the criteria for COLD and 0 of 6 samples exceed the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table ____.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48352, Lead		Region 9
Couser Canyon Creek		

LOE ID:	73428
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48352, Lead

Region 9

Couser Canyon Creek

LOE ID:	73429
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48362	Region 9
Couser Canyon Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the criteria for COLD and 0 of 5 samples exceed the criteria for MUN.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 5 samples exceed the criteria for COLD and 0 of 5 samples exceed the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48362, Malathion	Region 9
Couser Canyon Creek	

LOE ID:	73430
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the

Data Reference:	<p>criterion for Malathion.</p> Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48362, Malathion Couser Canyon Creek

Region 9

LOE ID:	78014
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

DECISION ID	48364	Region 9
Couser Canyon Creek		

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

 One line of evidence is available in the administrative record to assess this pollutant. One of 1 sample exceeds the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48364, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
Couser Canyon Creek	

LOE ID: 73431

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected on a single day 8/10/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48365	Region 9
Couser Canyon Creek		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 2 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48365, Nitrogen, Nitrite	Region 9
Couser Canyon Creek	

LOE ID: 73437

Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2004-8/11/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48366	Region 9
Couser Canyon Creek		
Pollutant:	Nitrogen, ammonia (Total Ammonia)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeds the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeds the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 	

samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48366, Nitrogen, ammonia (Total Ammonia)

Region 9

Couser Canyon Creek

LOE ID:	73407
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected on a single day 8/10/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48353

Region 9

Couser Canyon Creek

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 6 samples exceed the criteria for COLD and 0 of 6 samples exceed the criteria for MUN.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 6 samples exceed the criteria for COLD and 0 of 6 samples exceed the criteria for MUN and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table ____.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48353, Zinc
Couser Canyon Creek**

Region 9

LOE ID: 73439

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]

Temporal Representation: Data was collected over the time period 5/24/2004-6/8/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48353, Zinc

Region 9

Couser Canyon Creek

LOE ID: 73440

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Couser Canyon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]

Temporal Representation: Data was collected over the time period 5/24/2004-6/8/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 48363

Region 9

Couser Canyon Creek

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised

Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2006 to 2009 show that 6 of 6 single samples exceed the water quality objective for enterococcus of a SSM of 61/100 ml in fresh water for the protection of REC-1 beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Data from 2006 to 2009 show that 6 of 6 single samples exceed the water quality objective for enterococcus of a SSM of 61/100 ml in fresh water for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48363, Indicator Bacteria		Region 9
Couser Canyon Creek		
LOE ID:	73438	
Pollutant:	Total Coliform	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Water Contact Recreation	
Number of Samples:	6	
Number of Exceedances:	3	
Data and Information Type:	PATHOGEN MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Coliform, Total.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).	

Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48363, Indicator Bacteria	Region 9
Couser Canyon Creek	

LOE ID:	73420
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48363, Indicator Bacteria	Region 9
Couser Canyon Creek	

LOE ID:	73427
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Couser Canyon Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Couser Canyon Creek was collected at 1 monitoring site [Couser Canyon Creek @ Couser Canyon Road]
Temporal Representation:	Data was collected over the time period 5/24/2004-6/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Marcos, Lake, drain to central southwest fork of lake](#)
Water Body ID: CAR9045200020110620105350
Water Body Type: River & Stream

DECISION ID	50556	Region 9
San Marcos, Lake, drain to central southwest fork of lake		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50556, Cadmium	Region 9
San Marcos, Lake, drain to central southwest fork of lake	

LOE ID: 76082
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]
Temporal Representation:	Data was collected once yearly between July 2004 and June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50557	Region 9
San Marcos, Lake, drain to central southwest fork of lake		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Five samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50557, Chlorpyrifos
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID:	76098
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 50559
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Six samples exceed the Water Quality Criteria for Dazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Six samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50559, Diazinon
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID:	76101
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]

Temporal Representation: Data was collected over the time period 7/20/2004-6/11/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	50561	Region 9
San Marcos, Lake, drain to central southwest fork of lake		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the Eleven samples exceed the Water Quality Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Eleven samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50561, Lead	Region 9
San Marcos, Lake, drain to central southwest fork of lake	

LOE ID:	76122
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	One of the five samples exceeded the criteria of 3.2 ug/L. One of the samples was reported as "ND" without a reporting limit, therefore this data was not used in the assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from the Central southwest fork at a station called CAR13.
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through 2008. An additional sample was collected in 2004.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50561, Lead
San Marcos, Lake, drain to central southwest fork of lake

Region 9

LOE ID:	76121
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]

Temporal Representation:

Data was collected once yearly between July 2004 and June 2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID

50562

Region 9

San Marcos, Lake, drain to central southwest fork of lake

Pollutant:

Malathion

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

**Impairment from Pollutant or
Pollution:**

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Six samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Six samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50562, Malathion

Region 9

San Marcos, Lake, drain to central southwest fork of lake

LOE ID:

76123

Pollutant:

Malathion

LOE Subgroup:

Pollutant-Water

Matrix:

Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50563	Region 9
San Marcos, Lake, drain to central southwest fork of lake		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. One of the 17 samples exceed the Water Quality Criteria for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 17 samples exceeded the Water Quality Criteria for Zinc and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50563, Zinc
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID: 76137

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows:
0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]

Temporal Representation: Data was collected once yearly between July 2004 and June 2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

**Line of Evidence (LOE) for Decision ID 50563, Zinc
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID: 76138

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	One of the eleven samples exceed the hardness adjusted criteria.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Samples were collected from San Marcos, Lake, drain to central southwest fork of lake from Site CAR04 (lower San Marcos Creek), CAR13 (Central southwest fork), and Site CAR14 (Central southeast fork).
Temporal Representation:	Samples were collected on 7/20/2004, 9/16/2004, 9/28/2005, 6/22/2006, 7/18/2007, and 7/21/2008.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

DECISION ID	50558	Region 9
San Marcos, Lake, drain to central southwest fork of lake		

Pollutant:	Copper
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of the Eleven samples exceed the Water Quality Criteria for Copper.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>
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1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of Eleven samples exceed the Water Quality Criteria for Copper and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 50558, Copper
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID:	76099
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]
Temporal Representation:	Data was collected once yearly between July 2004 and June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 50558, Copper
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID:	76100
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Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	Two of five samples exceeded the criteria of 9.3 ug/L.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from the Central southwest fork at a station called CAR13.
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through 2008. An additional sample was collected in 2004.
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

DECISION ID	50560	Region 9
San Marcos, Lake, drain to central southwest fork of lake		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the Seven samples exceed the Water Quality Objective for Enterococcus, Seven out of Seven samples exceeded the Water Quality Objective for Fecal Coliform, and Six out of Seven samples exceeded the Evaluation Guideline for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section</p>
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303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the Seven samples exceed the Water Quality Objective for Enterococcus, Seven out of Seven samples exceeded the Water Quality Objective for Fecal Coliform, and Six out of Seven samples exceeded the Evaluation Guideline for Total Coliform and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 50560, Indicator Bacteria
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID:	76120
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 50560, Indicator Bacteria
San Marcos, Lake, drain to central southwest fork of lake**

Region 9

LOE ID:	76124
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 6 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50560, Indicator Bacteria
San Marcos, Lake, drain to central southwest fork of lake

Region 9

LOE ID:	76102
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southwest fork of lake to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Marcos, Lake, drain to central southwest fork of lake was collected at 1 monitoring site [Storm Drain Outfall to Lake San Marcos @ End of San Marino Drive]

Temporal Representation:

Data was collected over the time period 7/20/2004-6/11/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Marcos, Lake, drain to central southeast fork of lake](#)
Water Body ID: CAR9045200020110620113356
Water Body Type: River & Stream

DECISION ID	50525	Region 9
San Marcos, Lake, drain to central southeast fork of lake		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50525, Cadmium	Region 9
San Marcos, Lake, drain to central southeast fork of lake	

LOE ID: 76044
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring sites [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected 7/20/2004 - 6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50526	Region 9
San Marcos, Lake, drain to central southeast fork of lake		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50526, Chlorpyrifos
San Marcos, Lake, drain to central southeast fork of lake**

Region 9

LOE ID:	76045
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring site [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 50527
San Marcos, Lake, drain to central southeast fork of lake**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the Nine samples exceed the Water Quality Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Nine samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50527, Copper**Region 9****San Marcos, Lake, drain to central southeast fork of lake**

LOE ID: 76046

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring sites [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected 7/20/2004 - 6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50527, Copper	Region 9
San Marcos, Lake, drain to central southeast fork of lake	

LOE ID:	76047
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	One of the four samples exceeded the criteria of 9.3 ug/L.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from the Central southeast fork at a station called CAR14.
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through 2008 (data from 2005 was not reported).
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

DECISION ID	50547	Region 9
San Marcos, Lake, drain to central southeast fork of lake		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Dazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Dazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50547, Diazinon
San Marcos, Lake, drain to central southeast fork of lake****Region 9**

LOE ID: 76061

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game](#)

Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring site [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50549	Region 9
San Marcos, Lake, drain to central southeast fork of lake		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Four of Five samples exceed the Water Quality Objective for Enterococcus, Three of the Five samples exceeded the water quality objective for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of Five samples exceed the Water Quality Objective for Enterococcus, Three of the Five samples exceeded the water quality objective for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50549, Indicator Bacteria		Region 9
San Marcos, Lake, drain to central southeast fork of lake		

LOE ID:	76063
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring site [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50549, Indicator Bacteria

Region 9

San Marcos, Lake, drain to central southeast fork of lake

LOE ID:	76079
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.

Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring site [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50549, Indicator Bacteria	Region 9
San Marcos, Lake, drain to central southeast fork of lake	

LOE ID:	76062
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring site [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50553	Region 9
San Marcos, Lake, drain to central southeast fork of lake		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the Eight samples exceed the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50553, Lead

Region 9

San Marcos, Lake, drain to central southeast fork of lake

LOE ID:	76064
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake

Temporal Representation:	was collected at 1 monitoring sites [Tributary to Lake San Marcos @ End of El Chico Lane]
Environmental Conditions:	Data was collected 7/20/2004 - 6/11/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50553, Lead
San Marcos, Lake, drain to central southeast fork of lake

Region 9

LOE ID:	76065
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the three samples exceeded the criteria of 3.2 ug/L. One of the samples was reported as "ND" without a reporting limit, therefore this data was not used in the assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from the Central southeast fork at a station called CAR14.
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through 2008 (data from 2005 was not reported).
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

DECISION ID 50554
San Marcos, Lake, drain to central southeast fork of lake

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the .</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Five samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50554, Malathion
San Marcos, Lake, drain to central southeast fork of lake**

Region 9

LOE ID:	76078
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring site [Tributary to Lake San Marcos @ End of El Chico Lane]
Temporal Representation:	Data was collected over the time period 7/20/2004-6/11/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50555	Region 9
San Marcos, Lake, drain to central southeast fork of lake		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence is available in the administrative record to assess this pollutant. Zero of the Eight samples exceed the Water Quality Criteria for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Eight samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50555, Zinc		Region 9
San Marcos, Lake, drain to central southeast fork of lake		

LOE ID:	76081
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	Non-fixed station physical/chemical (conventional + toxicants)
Data Used to Assess Water Quality:	None of the three samples exceeded the criteria of 120 ug/L. One of the samples was reported as "ND" without a reporting limit, therefore this data was not used in the assessment.
Data Reference:	Data for Various Pollutants in Region 9, 2002-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (section 131.36 revised at 57 FR 60848, December 22, 1992).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a value of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A sample was collected from the Central southeast fork at a station called CAR14.
Temporal Representation:	Samples were collected annually in the summer months during the years: 2004 through 2008 (data from 2005 was not reported).
Environmental Conditions:	
QAPP Information:	The samples were collected and analyzed by the County of San Diego as part of their storm water program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50555, Zinc	Region 9
San Marcos, Lake, drain to central southeast fork of lake	

LOE ID:	76080
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos, Lake, drain to central southeast fork of lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Marcos, Lake, drain to central southeast fork of lake was collected at 1 monitoring sites [Tributary to Lake San Marcos @ End of El Chico Lane]

Temporal Representation:

Data was collected 7/20/2004 - 6/11/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Marcos Creek, unnamed fork at Twin Oaks Valley Road](#)
Water Body ID: CAR9045300020110812113554
Water Body Type: River & Stream

DECISION ID	50188	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50188, Cadmium	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road	

LOE ID: 76257
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected 9/28/2005 - 6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50192	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50192, Chlorpyrifos
San Marcos Creek, unnamed fork at Twin Oaks Valley Road**

Region 9

LOE ID:	75990
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos. The reporting limit for this assessment was less than the objective for this pollutant, and therefore none of the samples could be used to assess water quality.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 50193
San Marcos Creek, unnamed fork at Twin Oaks Valley Road**

Region 9

Pollutant: Copper

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.11.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50193, Copper
San Marcos Creek, unnamed fork at Twin Oaks Valley Road

Region 9

LOE ID: 75991

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]

Temporal Representation:

Data was collected 9/28/2005 - 6/27/2006.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	50194	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road		

Pollutant: Diazinon

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status

Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50194, Diazinon	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road	

LOE ID: 75992

Pollutant: Diazinon

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50191	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Two of the Two samples exceeded the Water Quality Objective for Enterococcus, One of the Two samples exceed the Water Quality Objective for Fecal Coliform, and Two of the Two samples exceeded the Evaluation Guideline for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the Two samples exceeded the Water Quality Objective for Enterococcus, One of the Two samples exceed the Water Quality Objective for Fecal Coliform, and Two of the Two samples exceeded the Evaluation Guideline for Total Coliform and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50191, Indicator Bacteria

Region 9

San Marcos Creek, unnamed fork at Twin Oaks Valley Road

LOE ID:	76007
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50191, Indicator Bacteria

Region 9

San Marcos Creek, unnamed fork at Twin Oaks Valley Road

LOE ID:	75994
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50191, Indicator Bacteria	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road	

LOE ID:	75993
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50195	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the Two samples exceed the Water Quality Criteria for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50195, Lead		Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road		

LOE ID:	76005
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Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected 9/28/2005 - 6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50196	Region 9
San Marcos Creek, unnamed fork at Twin Oaks Valley Road		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50196, Malathion
San Marcos Creek, unnamed fork at Twin Oaks Valley Road**

Region 9

LOE ID:	76006
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]
Temporal Representation:	Data was collected over the time period 9/28/2005-6/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 50197
San Marcos Creek, unnamed fork at Twin Oaks Valley Road**

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Water Quality Criteria for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Water Quality Criteria for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50197, Zinc San Marcos Creek, unnamed fork at Twin Oaks Valley Road

Region 9

LOE ID:	76008
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Marcos Creek, unnamed fork at Twin Oaks Valley Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the

hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Marcos Creek, unnamed fork at Twin Oaks Valley Road was collected at 1 monitoring site [San Marcos Creek @ Olive Street and Sycamore Drive]

Temporal Representation: Data was collected 9/28/2005 - 6/27/2006.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Elijo Creek \(San Diego County\)](#)
Water Body ID: CAR9046100020110816103441
Water Body Type: River & Stream

DECISION ID	49160	Region 9
San Elijo Creek (San Diego County)		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49160, Cadmium	Region 9
San Elijo Creek (San Diego County)	

LOE ID: 75706

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Temporal Representation:	Data was collected 6/10/2003 - 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49160, Cadmium
San Elijo Creek (San Diego County)

Region 9

LOE ID:	75705
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Temporal Representation:	Data was collected 6/10/2003 - 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49161	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 10 samples exceed the objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 10 samples exceed the objective for the Municipal & Domestic Supply beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49161, Chlorpyrifos	Region 9
San Elijo Creek (San Diego County)	

LOE ID:	78102
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 9/23/2005-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49161, Chlorpyrifos
San Elijo Creek (San Diego County)

Region 9

LOE ID:	75713
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 9/23/2005-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49162	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49162, Copper		Region 9
San Elijo Creek (San Diego County)		

LOE ID:	75714
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Temporal Representation:	Data was collected 6/10/2003 - 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49162, Copper
San Elijo Creek (San Diego County)

Region 9

LOE ID:	75715
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2

Temporal Representation:	monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Environmental Conditions:	Data was collected 6/10/2003 - 5/26/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49163	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 samples exceed the objective for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 8 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49163, Diazinon	Region 9
San Elijo Creek (San Diego County)	

LOE ID:	75716
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 9/23/2005-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49163, Diazinon

Region 9

San Elijo Creek (San Diego County)

LOE ID:	78103
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]

Temporal Representation:	Data was collected over the time period 9/23/2005-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49164	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49164, Lead		Region 9
San Elijo Creek (San Diego County)		

LOE ID:	75732
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Temporal Representation:	Data was collected 6/10/2003 - 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49164, Lead
San Elijo Creek (San Diego County)**

Region 9

LOE ID:	75731
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Temporal Representation:	Data was collected 6/10/2003 - 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49165	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 samples exceed the objective for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 8 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49165, Malathion	Region 9
San Elijo Creek (San Diego County)	

LOE ID:	75743
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 8 samples

Data Reference:	exceed the criterion for Malathion. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 9/23/2005-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49165, Malathion
San Elijo Creek (San Diego County)

Region 9

LOE ID:	78104
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 9/23/2005-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

DECISION ID	49168	Region 9
San Elijo Creek (San Diego County)		

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 1 samples exceed the objective for Nitrate/Nitrite (Nitrite + Nitrate as N).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 1 samples exceed the objective for the Municipal & Domestic Supply beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49168, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
San Elijo Creek (San Diego County)	

LOE ID: 75744

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 1 monitoring site [San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected on a single day 6/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49169	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the objective for Nitrogen, Nitrite .</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of the 2 samples exceed the objective for the Municipal & Domestic Supply beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49169, Nitrogen, Nitrite	Region 9
San Elijo Creek (San Diego County)	

LOE ID:	75745
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected on a single day 6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49166	Region 9
San Elijo Creek (San Diego County)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 	

3. Zero of the 14 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49166, Zinc
San Elijo Creek (San Diego County)**

Region 9

LOE ID:	75756
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Temporal Representation:	Data was collected 6/10/2003 - 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49166, Zinc
San Elijo Creek (San Diego County)**

Region 9

LOE ID: 75747

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ El Camino Real, San Elijo Creek @ La Granada]
Temporal Representation:	Data was collected 6/10/2003 - 5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49167	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 16 of 18, 5 of 18, and 5 of 18 single samples exceed the water quality objectives for SSMs of enterococcus, fecal coliform, and total coliform, respectively, for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2003 to 2009 show that 16 of 18, 5 of 18, and 5 of 18 single samples exceed the water quality objectives for SSMs of enterococcus, fecal coliform, and total coliform, respectively, for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 49167, Indicator Bacteria
San Elijo Creek (San Diego County)**

Region 9

LOE ID:	75730
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 6/10/2003-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49167, Indicator Bacteria
San Elijo Creek (San Diego County)**

Region 9

LOE ID:	75729
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 16 of 18 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 6/10/2003-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49167, Indicator Bacteria
San Elijo Creek (San Diego County)

Region 9

LOE ID:	75746
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected over the time period 6/10/2003-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49170	Region 9
San Elijo Creek (San Diego County)		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the objective for Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the objective for the Municipal & Domestic Supply beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49170, Nitrogen, ammonia (Total Ammonia)	Region 9
San Elijo Creek (San Diego County)	

LOE ID:	75704
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County) was collected at 2 monitoring sites [San Elijo Creek @ La Granada, San Elijo Creek @ El Camino Real]
Temporal Representation:	Data was collected on a single day 6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Elijo Creek \(San Diego County\), unnamed tributary at San Elijo Avenue](#)
Water Body ID: CAR9046100020110816104056
Water Body Type: River & Stream

DECISION ID	49100	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49100, Cadmium	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue	

LOE ID: 75759
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected between June 2006 and May 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49100, Cadmium

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	75758
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected between June 2006 and May 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49105	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Chlorpyrifos criteria for Municipal & Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the Chlorpyrifos criteria for Municipal & Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49105, Chlorpyrifos		Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

LOE ID:	75760
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos. The reporting limit (RL) of this assessment method is less than the water quality criteria for this applicable beneficial use. As a result of this we cannot confidently state that the beneficial use is not impaired by the presence of this pollutant. All four samples must be thrown out.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/20/2006-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49105, Chlorpyrifos

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	78109
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column,

Objective/Criterion Reference:	sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L. 2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/20/2006-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49132	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49132, Copper	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue	

LOE ID: 75770

Pollutant: Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected on a single day 6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49132, Copper

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	75771
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the

hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]

Temporal Representation: Data was collected on a single day 6/10/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49133	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant: Diazinon
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49133, Diazinon	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue	

LOE ID: 75772

Pollutant: Diazinon

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/20/2006-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49133, Diazinon

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	78110
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/20/2006-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49134	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49134, Lead	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue	

LOE ID: 75784

Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected between June 2006 and May 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49134, Lead

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	75785
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies

based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]

Temporal Representation: Data was collected on a single day 6/10/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49135	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49135, Malathion	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue	

LOE ID:	75796
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Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/20/2006-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49135, Malathion

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	78112
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/20/2006-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49136	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Nitrogen, Nitrite .

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the objective for the Municipal & Domestic Supply beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49136, Nitrogen, Nitrite	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue	

LOE ID:	75797
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Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected on a single day 6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49137	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Nitrogen, ammonia (Total Ammonia).</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 1 samples exceed the objective for the Municipal & Domestic Supply beneficial use and

this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49137, Nitrogen, ammonia (Total Ammonia)

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	75757
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected on a single day 6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

49138

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49138, Zinc

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID: 75799

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected on a single day 6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49138, Zinc	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue	

LOE ID:	75800
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected on a single day 6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49147	Region 9
San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Six out of 6 samples exceed the Contact Recreation Beneficial use water quality objective enterococcus, Five out of 7 samples exceeded the Water Contact Recreation Use Objective for Fecal Coliform, and 4 out of 7 samples exceeded the Water Contact Recreation use Objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six out of 6 samples exceed the Contact Recreation Beneficial use water quality objective enterococcus, Five out of 7 samples exceeded the Water Contact Recreation Use Objective for Fecal Coliform, and 4 out of 7 samples exceeded the Water Contact Recreation use Objective.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49147, Indicator Bacteria San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

Region 9

LOE ID:	75798
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or

Objective/Criterion Reference:	indigenoua aquatic life (Basin Plan). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/10/2003-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49147, Indicator Bacteria

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	75783
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/10/2003-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49147, Indicator Bacteria

Region 9

San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue

LOE ID:	75782
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Elijo Creek (San Diego County), unnamed tributary at San Elijo Avenue was collected at 1 monitoring site [Tributary of San Elijo Creek @ San Elijo Road]
Temporal Representation:	Data was collected over the time period 6/10/2003-5/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [La Zanja Canyon](#)
Water Body ID: CAR9051100020110816110901
Water Body Type: River & Stream

DECISION ID	48151	Region 9
La Zanja Canyon		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48151, Cadmium	Region 9
La Zanja Canyon	

LOE ID: 74070
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for La Zanja Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected yearly in 2004 and from 2006 to 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48152	Region 9
La Zanja Canyon		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48152, Chlorpyrifos
La Zanja Canyon**

Region 9

LOE ID:	74071
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for La Zanja Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 48157
La Zanja Canyon**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Five samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48157, Copper
La Zanja Canyon****Region 9**

LOE ID: 74072

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for La Zanja Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected yearly in 2004 and from 2006 to 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48159	Region 9
La Zanja Canyon		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Evaluation Guideline for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Evaluation Guideline for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48159, Diazinon		Region 9
La Zanja Canyon		

LOE ID:	74073
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for La Zanja Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48172	Region 9
La Zanja Canyon		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Five samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Five samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48172, Lead
La Zanja Canyon**

Region 9

LOE ID:	74076
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for La Zanja Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected yearly in 2004 and from 2006 to 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 48173
La Zanja Canyon**

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Five samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48173, Malathion La Zanja Canyon

Region 9

LOE ID:	74077
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for La Zanja Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48175	Region 9
La Zanja Canyon		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Five samples exceed the California Toxics Rule Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48175, Zinc		Region 9
La Zanja Canyon		

LOE ID:	74079
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for La Zanja Canyon to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected yearly in 2004 and from 2006 to 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48170	Region 9
La Zanja Canyon		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Five of the Five samples exceed the Single Sample Maximum Objective for Enterococcus, Four out of Five samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and One out of Five samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the Five samples exceed the Single Sample Maximum Objective for Enterococcus, Four out of Five samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and One out of Five samples exceeded the Single Sample Maximum Guideline for Total Coliform and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48170, Indicator Bacteria
La Zanja Canyon**

Region 9

LOE ID:	74078
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for La Zanja Canyon to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 48170, Indicator Bacteria
La Zanja Canyon**

Region 9

LOE ID:	74075
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for La Zanja Canyon to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48170, Indicator Bacteria

Region 9

La Zanja Canyon

LOE ID:	74074
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for La Zanja Canyon to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Zanja Canyon was collected at 1 monitoring site [La Zanja Canyon Creek @ Rancho Santa Fe Farms Road]

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Data was collected over the time period 8/12/2004-6/18/2009.

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Dieguito River, unnamed tributary below Hodges Dam](#)
Water Body ID: CAR9051100020111104113223
Water Body Type: River & Stream

DECISION ID	49171	Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the objective for the Warm Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49171, Cadmium	Region 9
San Dieguito River, unnamed tributary below Hodges Dam	

LOE ID: 75839
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49173	Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the Chlorpyrifos criteria for Municipal & Domestic Supply.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the zero samples exceed the Chlorpyrifos criteria for Municipal & Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49173, Chlorpyrifos
San Dieguito River, unnamed tributary below Hodges Dam**

Region 9

LOE ID:	75840
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 49183
San Dieguito River, unnamed tributary below Hodges Dam**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the objective for the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49183, Copper
San Dieguito River, unnamed tributary below Hodges Dam****Region 9**

LOE ID: 75841

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49185	Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the objective for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the objective for the Warm Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49185, Diazinon		Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

LOE ID:	75658
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49188	Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the objective for the Warm Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49188, Lead
San Dieguito River, unnamed tributary below Hodges Dam**

Region 9

LOE ID:	75661
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 49189
San Dieguito River, unnamed tributary below Hodges Dam**

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the objective for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the objective for the Warm Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 49189, Malathion
San Dieguito River, unnamed tributary below Hodges Dam

Region 9

LOE ID:	75662
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49190	Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the objective for the Warm Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49190, Zinc		Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

LOE ID:	75703
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Dieguito River,

Data Reference:	unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected 8/12/2004 - 6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49187	Region 9
San Dieguito River, unnamed tributary below Hodges Dam		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Five out of 5 samples exceed the Contact Recreation Beneficial use water quality objective enterococcus, two out of 7 samples exceeded the Water Contact Recreation Use Objective for Fecal Coliform, and one out of 7 samples exceeded the Water Contact Recreation use Objective for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five out of 5 samples exceed the Contact Recreation Beneficial use water quality objective enterococcus, two out of 7 samples exceeded the Water Contact Recreation Use Objective for Fecal Coliform, and one out of 7 samples exceeded the Water Contact Recreation use Objective for Total Coliform and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49187, Indicator Bacteria

Region 9

San Dieguito River, unnamed tributary below Hodges Dam

LOE ID: 75659

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
Number of Exceedances: 5

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows:
5 of 5 samples exceed the criterion for Enterococci.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]

Temporal Representation: Data was collected over the time period 8/12/2004-6/18/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49187, Indicator Bacteria

Region 9

San Dieguito River, unnamed tributary below Hodges Dam

LOE ID: 75660

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Dieguito River, unnamed

	tributary below Hodges Dam to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49187, Indicator Bacteria

Region 9

San Dieguito River, unnamed tributary below Hodges Dam

LOE ID:	75702
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Dieguito River, unnamed tributary below Hodges Dam to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Dieguito River, unnamed tributary below Hodges Dam was collected at 1 monitoring site [Green Valley Creek @ Rancho Bernardo Road]
Temporal Representation:	Data was collected over the time period 8/12/2004-6/18/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s):

Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Ironsides Creek](#)
Water Body ID: CAR9055400020110828180822
Water Body Type: River & Stream

DECISION ID	47915	Region 9
Ironsides Creek		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 47915, Benthic Community Effects	Region 9
Ironsides Creek	

LOE ID: 80831
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following station: 905SDISS2
Temporal Representation:	Surveys done 2008
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	RWB9 Status Sampling 2007 and 2008

Line of Evidence (LOE) for Decision ID 47915, Benthic Community Effects

Region 9

Ironside Creek

LOE ID:	73905
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was below 43 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

Objective/Criterion Reference:	that produce detrimental physiological responses in human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 905SDISS2 (Ironsides Creek).
Temporal Representation:	Surveys done May 8, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [McGonigle Canyon](#)
Water Body ID: CAR9061000020110906121011
Water Body Type: River & Stream

DECISION ID	47896	Region 9
McGonigle Canyon		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47896, Arsenic	Region 9
McGonigle Canyon	

LOE ID: 74279
Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 47896, Arsenic
McGonigle Canyon**

Region 9

LOE ID:	74265
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]

Temporal Representation: Data was collected on a single day 6/3/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	47901	Region 9
McGonigle Canyon		

Pollutant: **Benthic Community Effects**

Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have a sufficient sample size of associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47901, Benthic Community Effects	Region 9
McGonigle Canyon	

LOE ID: 72800

Pollutant: Benthic-Macroinvertebrate Bioassessments

LOE Subgroup: Population/Community Degradation

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 1.4. tr11e SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for Southern California Regional Watershed Monitoring Program Bioassessment, Version 1.0, and Freshwater Bioassessment from Weston Solutions.

Line of Evidence (LOE) for Decision ID 47901, Benthic Community Effects

Region 9

McGonigle Canyon

LOE ID:	79567
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected was below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of

Objective/Criterion Reference:	species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The sample was collected at 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan
QAPP Information Reference(s):	Quality Assurance Project Plan for Southern California Regional Watershed Monitoring Program Bioassessment, Version 1.0, and Freshwater Bioassessment from Weston Solutions.

DECISION ID 47900		Region 9
McGonigle Canyon		
Pollutant:	Bifenthrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47900, Bifenthrin**Region 9****McGonigle Canyon**

LOE ID:	74279
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47900, Bifenthrin**Region 9****McGonigle Canyon**

LOE ID:	78058
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	47905	Region 9
McGonigle Canyon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47905, Cadmium

Region 9

McGonigle Canyon

LOE ID:	74279
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47905, Cadmium

Region 9

McGonigle Canyon

LOE ID:	74270
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	47906	Region 9
McGonigle Canyon		
Pollutant:	Chromium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

McGonigle Canyon

LOE ID:	74279
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47906, Chromium

Region 9

McGonigle Canyon

LOE ID:	74273
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for McGonigle

	Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	47907	Region 9
McGonigle Canyon		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47907, Copper**Region 9****McGonigle Canyon**

LOE ID:	74279
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47907, Copper**Region 9****McGonigle Canyon**

LOE ID:	74274
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	47912	Region 9
McGonigle Canyon		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 0 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47912, Cypermethrin
McGonigle Canyon

Region 9

LOE ID:	74279
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 47912, Cypermethrin
McGonigle Canyon

Region 9

LOE ID:	78059
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 47908		Region 9
McGonigle Canyon		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47908, Lead
McGonigle Canyon**

Region 9

LOE ID: 74279

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of *Ceriodaphnia dubia*.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.

Guideline Reference:

Spatial Representation: The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation: The samples were collected in June 2009.
Environmental Conditions:
QAPP Information: This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

**Line of Evidence (LOE) for Decision ID 47908, Lead
McGonigle Canyon**

Region 9

LOE ID: 74277

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	47909	Region 9
McGonigle Canyon		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47909, Nickel
McGonigle Canyon**

Region 9

LOE ID:	74279
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 47909, Nickel
McGonigle Canyon**

Region 9

LOE ID:	74278
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	47913	Region 9
McGonigle Canyon		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the one samples exceed the objective for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47913, Toxicity

Region 9

McGonigle Canyon

LOE ID:	74279
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID

47910

Region 9

McGonigle Canyon

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47910, Zinc
McGonigle Canyon

Region 9

LOE ID: 74279

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of Ceriodaphnia dubia.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining

Guideline Reference:	whether the sample response is lower than the evaluation threshold.
Spatial Representation:	The samples were collected from site 906_SMC01158, McGonigle Canyon.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 47910, Zinc
McGonigle Canyon**

Region 9

LOE ID:	74280
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for McGonigle Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGonigle Canyon was collected at 1 monitoring site [McGonigle Canyon - 906_SMC01158]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Tecolote Creek, South Fork](#)
Water Body ID: CAR9065000020110906151725
Water Body Type: River & Stream

DECISION ID	53298	Region 9
Tecolote Creek, South Fork		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53298, Arsenic	Region 9
Tecolote Creek, South Fork	

LOE ID: 77093
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	51760	Region 9
Tecolote Creek, South Fork		
Pollutant:	Benthic Community Effects	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and	

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51760, Benthic Community Effects

Region 9

Tecolote Creek, South Fork

LOE ID:	76893
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. One of the samples exhibited statistically and biologically significant toxicity. The failed toxicity tests included survival and reproduction of <i>Ceriodaphnia dubia</i> .
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. Additionally, the biological significance of the sample is evaluated by determining whether the sample response is lower than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 906_SMC01046, Tecolote Creek, S. Fork.
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 51760, Benthic Community Effects

Region 9

Tecolote Creek, South Fork

LOE ID:	72799
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 11.4. tr11e SMC bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at 906_SMC01046, Tecolote Creek, S. Fork.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 51760, Benthic Community Effects

Region 9

Tecolote Creek, South Fork

LOE ID:	79698
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was taken from one stations in Tecolote Creek (south fork tributary). The CSCI was below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of

Objective/Criterion Reference:	species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected at stations SMC01046
Temporal Representation:	The sample was collected in 2009
Environmental Conditions:	
QAPP Information:	Data collected following the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.
QAPP Information Reference(s):	e-mail clarifying QAPP information Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

DECISION ID	51660	Region 9
Tecolote Creek, South Fork		

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	

Line of Evidence (LOE) for Decision ID 51660, Bifenthrin	Region 9
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Tecolote Creek, South Fork

LOE ID:	78184
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	53299	Region 9
Tecolote Creek, South Fork		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53299, Cadmium

Region 9

Tecolote Creek, South Fork

LOE ID:	77107
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID

53300

Region 9

Tecolote Creek, South Fork

Pollutant: Chromium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53300, Chromium

Region 9

Tecolote Creek, South Fork

LOE ID: 77110

Pollutant: Chromium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to

protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:

[Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]

Temporal Representation:

Data was collected on a single day 5/21/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID

53301

Region 9

Tecolote Creek, South Fork

Pollutant:

Copper

Final Listing Decision:

Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final

New Decision

Listing Decision:

Revision Status

Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53301, Copper

Region 9

Tecolote Creek, South Fork

LOE ID:

76868

Pollutant:

Copper

LOE Subgroup:

Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	51663	Region 9
Tecolote Creek, South Fork		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51663, Cypermethrin
Tecolote Creek, South Fork**

Region 9

LOE ID:	78148
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 53302
Tecolote Creek, South Fork

Region 9

Pollutant: Lead

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53302, Lead
Tecolote Creek, South Fork

Region 9

LOE ID: 76872

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego Dept. of Public Works data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]

Temporal Representation: Data was collected on a single day 5/21/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.](#)

DECISION ID	53303	Region 9
Tecolote Creek, South Fork		

Pollutant: Nickel

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53303, Nickel	Region 9
Tecolote Creek, South Fork	

LOE ID: 76892

Pollutant: Nickel

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	53304	Region 9
Tecolote Creek, South Fork		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53304, Zinc

Region 9

Tecolote Creek, South Fork

LOE ID:	76894
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Tecolote Creek, South Fork to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek, South Fork was collected at 1 monitoring site [Tecolote Creek, S. Fork - 906_SMC01046]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID

51731

Region 9

Tecolote Creek, South Fork

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Data from 2007 to 2010 show that 21 of 26 and 14 of 27 samples exceed the water quality objectives for enterococcus and fecal coliform for the protection of REC-1 beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Data from 2007 to 2010 show that 21 of 26 and 14 of 27 samples exceed the water quality objectives for enterococcus and fecal coliform for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 51731, Indicator Bacteria	Region 9
Tecolote Creek, South Fork	

LOE ID:	76870
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	21
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-one of the twenty-six samples exceeded the enterococcus objective.
Data Reference:	Data for Various Pollutants in the City of San Diego Tecolote Creek, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The enterococcus concentration shall not exceed more than 61/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from 10 stations on Tecolote Creek. Sites 14, 14UP, 14 UP2, 15, 16, 17, 18, 19, 24 and 5. Results for sites 14 and 14UP were averaged because they

Temporal Representation:	are within 200 meters.
Environmental Conditions:	Samples were collected between September 2007 and March 2010.
QAPP Information:	No QAPP was submitted. The data was collected for the Tecolte Creek Bacterial Source Tracking Investigation and used for background for the City of San Diego Bacteria TMDL.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51731, Indicator Bacteria	Region 9
Tecolote Creek, South Fork	

LOE ID:	76871
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	14
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fourteen of the twenty-seven samples exceeded the fecal Coliform objective.
Data Reference:	Data for Various Pollutants in the City of San Diego Tecolote Creek, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Fecal Coliform concentration shall not exceed more than 400/100 ml. Water Quality Control Plan for the San Diego Basin.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from 10 stations on Tecolote Creek. Sites 14, 14UP, 14 UP2, 15, 16, 17, 18, 19, 24 and 5. Results for sites 14 and 14UP were averaged because they were within 200 meters of each other.
Temporal Representation:	Samples were collected between September 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	No QAPP was submitted. The data was collected for the Tecolte Creek Bacterial Source Tracking Investigation and used for background for the City of San Diego Bacteria TMDL.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Murphy Canyon](#)
Water Body ID: CAR9071100020110906133850
Water Body Type: River & Stream

DECISION ID	48274	Region 9
Murphy Canyon		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48274, Arsenic	Region 9
Murphy Canyon	

LOE ID: 74430
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48274, Arsenic

Region 9

Murphy Canyon

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	51714	Region 9
Murphy Canyon		

Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	Benthic Community Effects Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 51714, Benthic Community Effects	Region 9
Murphy Canyon	

LOE ID:	72802
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The score was 10. tr11e SMC bioassessment
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at 907_SMC01990, Murphy Canyon.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for Southern California Regional Watershed Monitoring Program Bioassessment, Version 1.0, and Freshwater Bioassessment from Weston Solutions.

Line of Evidence (LOE) for Decision ID 51714, Benthic Community Effects Murphy Canyon

Region 9

LOE ID:	79634
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was taken at one station. The one sample was below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Bioassessment Data for Various Pollutants from Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration,

Objective/Criterion Reference:	or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The sample was collected at 907_SMC01990, Murphy Canyon.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for Southern California Regional Watershed Monitoring Program Bioassessment, Version 1.0, and Freshwater Bioassessment from Weston Solutions.

DECISION ID 48275		Region 9
Murphy Canyon		
Pollutant:	Bifenthrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples (one sample analyzed, but detection limit is greater than criteria)exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Murphy Canyon

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 48275, Bifenthrin

Region 9

Murphy Canyon

LOE ID:	78068
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for

Data Reference:	Bifenthrin. Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The UC Davis Criteria for Bifenthrin for the protection of aquatic organisms is a 4 day average of 0.0006 ug/L (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID 48276		Region 9
Murphy Canyon		
Pollutant:	Cadmium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 48276, Cadmium		Region 9

Murphy Canyon

LOE ID:	74433
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48276, Cadmium Murphy Canyon

Region 9

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	48277	Region 9
Murphy Canyon		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48277, Chromium	Region 9
Murphy Canyon	

LOE ID:	74436
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 48277, Chromium
Murphy Canyon**

Region 9

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	48278	Region 9
Murphy Canyon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48278, Copper	Region 9
Murphy Canyon	

LOE ID:	74437
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 48278, Copper
Murphy Canyon**

Region 9

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	48279	Region 9
Murphy Canyon		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples (one sample collected but method detection limit is greater than the criteria) exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 3.1 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48279, Cypermethrin	Region 9
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Murphy Canyon

LOE ID: 74442

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of *Ceriodaphnia dubia*.
Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation: The samples were collected in June 2009.

Environmental Conditions:
QAPP Information: This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.

QAPP Information Reference(s): [e-mail clarifying QAPP information](#)

Line of Evidence (LOE) for Decision ID 48279, Cypermethrin

Region 9

Murphy Canyon

LOE ID: 78069

Pollutant: Cypermethrin
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin, total.
Data Reference: [Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48281	Region 9
Murphy Canyon		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 48281, Lead	Region 9
Murphy Canyon	

LOE ID:	74440
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

**Line of Evidence (LOE) for Decision ID 48281, Lead
Murphy Canyon**

Region 9

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	48283	Region 9
Murphy Canyon		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48283, Nickel	Region 9
Murphy Canyon	

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

**Line of Evidence (LOE) for Decision ID 48283, Nickel
Murphy Canyon**

Region 9

LOE ID:	74441
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

DECISION ID	48288	Region 9
Murphy Canyon		

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the OBJECTIVE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the OBJECTIVE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48288, Toxicity	Region 9
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Murphy Canyon

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID

48286

Region 9

Murphy Canyon

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section</p>

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48286, Zinc Murphy Canyon

Region 9

LOE ID:	74443
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Murphy Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Murphy Canyon was collected at 1 monitoring site [Murphy Canyon - 907_SMC01990]
Temporal Representation:	Data was collected on a single day 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and SMC Workplan.

Line of Evidence (LOE) for Decision ID 48286, Zinc

Region 9

Murphy Canyon

LOE ID:	74442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to test for toxicity. None of the samples exhibited statistically significant toxicity. The toxicity tests included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data for Metals, Nutrients, Inorganics, Pesticides and Toxicity from the Stormwater Monitoring Coalition Regional Monitoring of Southern California Coastal Watersheds, 2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected from site 907_SMC01990, Murphy Canyon .
Temporal Representation:	The samples were collected in June 2009.
Environmental Conditions:	
QAPP Information:	This data was collected for the Regional Monitoring Of Southern California's Coastal Watersheds - Stormwater Monitoring Coalition Bioassessment Working Group. CRG Marine Laboratories Quality Assurance Program Document was provided.
QAPP Information Reference(s):	e-mail clarifying QAPP information

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Eucalyptus Hills Creek](#)
Water Body ID: CAR9071200020110816160800
Water Body Type: River & Stream

DECISION ID	47383	Region 9
Eucalyptus Hills Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the Basin Plan Objective for cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the Basin Plan Objective for cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47383, Cadmium	Region 9
Eucalyptus Hills Creek	

LOE ID: 73666
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Temporal Representation:	Data was collected from 6/9/2003 - 6/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47384	Region 9
Eucalyptus Hills Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the Evaluation Guideline for Chlorpyrifos. Seven samples were collected between 8/24/2004 and 7/19/2009, all samples were non detects, however as per the management guidance document on quantitation limits all seven of the samples had to be thrown out.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47384, Chlorpyrifos

Region 9

Eucalyptus Hills Creek

LOE ID:	73667
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Temporal Representation:	Data was collected over the time period 8/19/2004-6/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47385

Region 9

Eucalyptus Hills Creek

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the California Toxics Rule Objective for copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the California Toxics Rule for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47385, Copper
Eucalyptus Hills Creek**

Region 9

LOE ID: 73668

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]

Temporal Representation:

Data was collected from 6/9/2003 - 6/15/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47389	Region 9
Eucalyptus Hills Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the California Toxics Rule Objective for lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the California Toxics Rule Objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47389, Lead	Region 9
Eucalyptus Hills Creek	

LOE ID:	73672
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Temporal Representation:	Data was collected from 6/9/2003 - 6/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47390	Region 9
Eucalyptus Hills Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the USEPA criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of seven samples exceeded the USEPA Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47390, Malathion
Eucalyptus Hills Creek**

Region 9

LOE ID:	73673
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Temporal Representation:	Data was collected over the time period 8/19/2004-6/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 47392
Eucalyptus Hills Creek**

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the California Toxics Rule Objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of seven samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47392, Zinc

Region 9

Eucalyptus Hills Creek

LOE ID:	73675
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]

Data was collected from 6/9/2003 - 6/15/2009.

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47386	Region 9
Eucalyptus Hills Creek		

Pollutant: Diazinon
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Two of the 7 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 7 samples exceed the criteria and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47386, Diazinon	Region 9
Eucalyptus Hills Creek	

LOE ID: 73669

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Temporal Representation:	Data was collected over the time period 8/19/2004-6/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48839	Region 9
Eucalyptus Hills Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2029
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Eight of the Eight samples exceed the Single Sample Maximum Objective for Enterococcus, Seven out of Seven samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Seven out of Seven samples exceeded the Single Sample Maximum Guideline for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the Eight samples exceed the Single Sample Maximum Objective for Enterococcus, Seven out of Seven samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Seven out of Seven samples exceeded the Single Sample Maximum Guideline for Total Coliform, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48839, Indicator Bacteria
Eucalyptus Hills Creek**

Region 9

LOE ID:	73670
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Temporal Representation:	Data was collected over the time period 6/9/2003-7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 48839, Indicator Bacteria
Eucalyptus Hills Creek**

Region 9

LOE ID:	73674
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7

Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Temporal Representation:	Data was collected over the time period 6/9/2003-7/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48839, Indicator Bacteria	Region 9
Eucalyptus Hills Creek	

LOE ID:	73671
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Eucalyptus Hills Creek to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Eucalyptus Hills Creek was collected at 1 monitoring site [

Temporal Representation:	Eucalyptus Hills Creek @ Riverside Drive (Storm Drain Channel)]
Environmental Conditions:	Data was collected over the time period 6/9/2003-7/29/2008.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Oak Creek \(San Diego County\)](#)
Water Body ID: CAR9071400020110817144602
Water Body Type: River & Stream

DECISION ID 48280 **Region 9**
Oak Creek (San Diego County)

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48280, Cadmium **Region 9**
Oak Creek (San Diego County)

LOE ID: 74451
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oak Creek (San Diego County) was collected at 1 monitoring site [Oak Creek @ Olde Highway 80]
Temporal Representation:	Data was collected on a single day 5/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48282	Region 9
Oak Creek (San Diego County)		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48282, Copper
Oak Creek (San Diego County)**

Region 9

LOE ID: 74452

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Oak Creek (San Diego County) was collected at 1 monitoring site [Oak Creek @ Olde Highway 80]

Temporal Representation: Data was collected on a single day 5/21/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

**DECISION ID 48287
Oak Creek (San Diego County)**

Region 9

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of

the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the two samples exceed the objective for enterococcus. Two of two samples exceed the objective for fecal coliform and two of two samples exceed the objective for total coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of Two samples exceed the objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48287, Indicator Bacteria
Oak Creek (San Diego County)**

Region 9

LOE ID:	74454
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oak Creek (San Diego County) was collected at 1 monitoring site [Oak Creek @ Olde Highway 80]
Temporal Representation:	Data was collected over the time period 5/21/2003-9/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48287, Indicator Bacteria
Oak Creek (San Diego County)

Region 9

LOE ID: 74456

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).

Guideline Reference: [Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.](#)

Spatial Representation: Data for this line of evidence for Oak Creek (San Diego County) was collected at 1 monitoring site [Oak Creek @ Olde Highway 80]

Temporal Representation: Data was collected over the time period 5/21/2003-9/11/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48287, Indicator Bacteria
Oak Creek (San Diego County)

Region 9

LOE ID: 74453

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oak Creek (San Diego County) was collected at 1 monitoring site [Oak Creek @ Olde Highway 80]
Temporal Representation:	Data was collected over the time period 5/21/2003-9/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48284	Region 9
Oak Creek (San Diego County)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48284, Lead
Oak Creek (San Diego County)**

Region 9

LOE ID:	74455
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oak Creek (San Diego County) was collected at 1 monitoring site [Oak Creek @ Olde Highway 80]
Temporal Representation:	Data was collected on a single day 5/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 48285
Oak Creek (San Diego County)**

Region 9

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48285, Zinc
Oak Creek (San Diego County)**

Region 9

LOE ID:	74457
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Oak Creek (San Diego County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oak Creek (San Diego County) was collected at 1 monitoring site [Oak Creek @ Olde Highway 80]
Temporal Representation:	Data was collected on a single day 5/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Vicente Creek \(San Diego County\), unnamed tributary at Arena Drive](#)
Water Body ID: CAR9072300020110817151013
Water Body Type: River & Stream

DECISION ID	49123	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49123, Cadmium	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive	

LOE ID: 76273
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on 6/23/2003 and 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49123, Cadmium

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	76272
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on 6/23/2003 and 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49124	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the CRITERIA. One sample was collected, but the detection limit is greater than the criteria for warm freshwater habitat. Zero of the one sample exceeded the guideline for drinking water (MUN).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples (WARM) and zero of one samples (MUN) exceeded the CRITERIA (WARM) or GUIDELINE (MUN) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49124, Chlorpyrifos		Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		

LOE ID:	78128
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on a single day 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49124, Chlorpyrifos

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	76274
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on a single day 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49125		Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		
Pollutant:	Copper	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 49125, Copper		Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		
LOE ID:	76280	
Pollutant:	Copper	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on 6/23/2003 and 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49125, Copper

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	76279
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]

Temporal Representation:

Data was collected on 6/23/2003 and 5/11/2006.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49126	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49126, Diazinon	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive	

LOE ID:	76281
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on a single day 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49126, Diazinon

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	78129
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on a single day 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53446	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2,one line(s) of evidence are necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Two of two samples exceed the water quality objective for enterococcus of a SSM of 61/100 ml for the protection of REC-1 beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of two samples exceed the water quality objective for enterococcus of a SSM of 61/100 ml for the protection of REC-1 beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53446, Indicator Bacteria	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive	

LOE ID:	76284
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 6/23/2003-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53446, Indicator Bacteria

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	76294
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration

Guideline Reference:	shall not exceed 10000 MPN/100 ml (CDPH 2006). Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 6/23/2003-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53446, Indicator Bacteria	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive	

LOE ID:	76283
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 6/23/2003-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49131	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49131, Lead		Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		
LOE ID:	76285	
Pollutant:	Lead	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	2	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.	
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition	

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]

Temporal Representation:

Data was collected on 6/23/2003 and 5/11/2006.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49131, Lead

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID: 76286

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]

Temporal Representation:

Data was collected on 6/23/2003 and 5/11/2006.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 49139

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49139, Malathion

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID: 78130

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on a single day 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49139, Malathion

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	76291
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on a single day 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49140

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49140, Nitrate/Nitrite (Nitrite + Nitrate as N)
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

Region 9

LOE ID: 76292

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San

Vicente Road]

Temporal Representation: Data was collected on a single day 6/24/2003.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49142	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		

Pollutant: Nitrogen, Nitrite

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49142, Nitrogen, Nitrite	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive	

LOE ID: 76293

Pollutant: Nitrogen, Nitrite

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected over the time period 6/23/2003-6/24/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49141	Region 9
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive		
Pollutant:	Nitrogen, ammonia (Total Ammonia)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One line of evidence are available in the administrative record to assess this pollutant. Zero of the one sample exceed the GUIDELINE.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the GUIDELINE and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	76271
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on a single day 6/23/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49143

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of the two

samples exceed the CRITERIA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the CRITERIA and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of sixteen samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49143, Zinc

Region 9

San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

LOE ID:	76301
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]
Temporal Representation:	Data was collected on 6/23/2003 and 5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 49143, Zinc
San Vicente Creek (San Diego County), unnamed tributary at Arena Drive

Region 9

LOE ID: 76295

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for San Vicente Creek (San Diego County), unnamed tributary at Arena Drive was collected at 1 monitoring site [Tributary of San Vicente Creek @ San Vicente Road]

Temporal Representation: Data was collected on 6/23/2003 and 5/11/2006.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Casa de Oro Creek](#)
Water Body ID: CAR9091200020110812132234
Water Body Type: River & Stream

DECISION ID	48264	Region 9
Casa de Oro Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 15 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48264, Cadmium	Region 9
Casa de Oro Creek	

LOE ID: 73150
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 13

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Casa de Oro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casa de Oro Creek was collected at 2 monitoring sites [Casa de Oro Creek @ Kenwood Drive and Barbic Court, Casa de Oro Creek @ Valencia Street/Kings View Circle]
Temporal Representation:	Data was collected from 1/2/2003 through 1/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48265	Region 9
Casa de Oro Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Zero of 0 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48265, Chlorpyrifos
Casa de Oro Creek**

Region 9

LOE ID:	73151
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Casa de Oro Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Casa de Oro Creek was collected at 2 monitoring sites [Casa de Oro Creek @ Valencia Street/Kings View Circle, Casa de Oro Creek @ Kenwood Drive and Barbic Court]
Temporal Representation:	Data was collected over the time period 9/26/2005-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 48266
Casa de Oro Creek**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of 13 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48266, Copper
Casa de Oro Creek

Region 9

LOE ID:	73152
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Casa de Oro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Casa de Oro Creek was collected at 2 monitoring sites [Casa de Oro Creek @ Kenwood Drive and Barbic Court, Casa de Oro Creek @ Valencia Street/Kings View Circle]
Temporal Representation:	Data was collected from 1/2/2003 through 1/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48267	Region 9
Casa de Oro Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 9 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 9 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48267, Diazinon		Region 9
Casa de Oro Creek		

LOE ID:	73153
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Casa de Oro Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Casa de Oro Creek was collected at 2 monitoring sites [Casa de Oro Creek @ Valencia Street/Kings View Circle, Casa de Oro Creek @ Kenwood Drive and Barbic Court]
Temporal Representation:	Data was collected over the time period 9/26/2005-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48268	Region 9
Casa de Oro Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of 13 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48268, Lead

Region 9

Casa de Oro Creek

LOE ID: 73154

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 13
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Casa de Oro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Casa de Oro Creek was collected at 2 monitoring sites [Casa de Oro Creek @ Kenwood Drive and Barbic Court, Casa de Oro Creek @ Valencia Street/Kings View Circle]

Temporal Representation: Data was collected from 1/2/2003 through 1/16/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 48289

Region 9

Casa de Oro Creek

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of 9 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 9 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 48289, Malathion
Casa de Oro Creek

Region 9

LOE ID:	73155
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Casa de Oro Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Casa de Oro Creek was collected at 2 monitoring sites [Casa de Oro Creek @ Valencia Street/Kings View Circle, Casa de Oro Creek @ Kenwood Drive and Barbic Court]
Temporal Representation:	Data was collected over the time period 9/26/2005-6/16/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48290	Region 9
Casa de Oro Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of 13 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 13 samples exceed the criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48290, Zinc	Region 9
Casa de Oro Creek	

LOE ID:	73156
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Casa de Oro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the

Data Reference:	criterion for Zinc. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casa de Oro Creek was collected at 2 monitoring sites [Casa de Oro Creek @ Kenwood Drive and Barbic Court, Casa de Oro Creek @ Valencia Street/Kings View Circle]
Temporal Representation:	Data was collected from 1/2/2003 through 1/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Spring Valley Creek](#)
Water Body ID: CAR9091200020110812135958
Water Body Type: River & Stream

DECISION ID	49569	Region 9
Spring Valley Creek		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49569, Arsenic	Region 9
Spring Valley Creek	

LOE ID: 77114
Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat
Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Arsenic.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49575	Region 9
Spring Valley Creek		
Pollutant:	Azinphos-methyl (Guthion)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 49575, Azinphos-methyl (Guthion)**Region 9****Spring Valley Creek**

LOE ID:	78185
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for Azinphos Methyl (Guthion) for the protection of freshwater aquatic life is a maximum of 0.01 ug/l.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID**49664****Region 9****Spring Valley Creek**

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the criterion.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49664, Cadmium
Spring Valley Creek**

Region 9

LOE ID:	77115
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 2 monitoring sites [Drainage Channel @ Quarry Rd. & Swap Meet Rd., Spring Valley Creek @ Valencia Street/Kings View Circle]
Temporal Representation:	Data was collected over the time period 6/24/2003-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49664, Cadmium
Spring Valley Creek**

Region 9

LOE ID:	77116
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd. - 909SWT07]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49642	Region 9
Spring Valley Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero</p>

samples exceed the beneficial use guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49642, Chlorpyrifos
Spring Valley Creek**

Region 9

LOE ID:	77119
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 2 monitoring sites [Spring Valley Creek @ Valencia Street/Kings View Circle, Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 9/26/2005-6/16/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49677	Region 9
Spring Valley Creek		

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of three samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49677, Chromium	Region 9
Spring Valley Creek	

LOE ID:	77120
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Spring

	Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chromium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd. - 909SWT07]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49682	Region 9
Spring Valley Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the beneficial use guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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**Line of Evidence (LOE) for Decision ID 49682, Copper
Spring Valley Creek**

Region 9

LOE ID:	77121
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 2 monitoring sites [Drainage Channel @ Quarry Rd. & Swap Meet Rd., Spring Valley Creek @ Valencia Street/Kings View Circle]
Temporal Representation:	Data was collected over the time period 6/24/2003-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49682, Copper
Spring Valley Creek**

Region 9

LOE ID:	77122
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Copper.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd. - 909SWT07]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49666	Region 9
Spring Valley Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

Line of Evidence (LOE) for Decision ID 49666, Diazinon
Spring Valley Creek

Region 9

LOE ID:	77128
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 2 monitoring sites [Spring Valley Creek @ Valencia Street/Kings View Circle, Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 9/26/2005-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49666, Diazinon
Spring Valley Creek

Region 9

LOE ID:	78187
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49668	Region 9
Spring Valley Creek		

Pollutant:	Dimethoate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49668, Dimethoate
Spring Valley Creek**

Region 9

LOE ID:	77943
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**DECISION ID 49671
Spring Valley Creek**

Region 9

Pollutant:	Disulfoton
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49671, Disulfoton
Spring Valley Creek**

Region 9

LOE ID:	77944
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for disulfoton is 0.05 µg/L (US EPA 1973 guidance)..
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Pollutant:	Ethoprop
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the beneficial use guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49672, Ethoprop	Region 9
Spring Valley Creek	

LOE ID:	77945
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

Objective/Criterion Reference:	life (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49773	Region 9
Spring Valley Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence are necessary to assess listing status.</p> <p>One lines of evidence is available in the administrative record to assess this pollutant. Zero of the Three samples exceed the single objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49773, Indicator Bacteria	Region 9
Spring Valley Creek	

LOE ID:	77129
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49694	Region 9
Spring Valley Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49694, Lead
Spring Valley Creek**

Region 9

LOE ID:	77136
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 2 monitoring sites [Drainage Channel @ Quarry Rd. & Swap Meet Rd., Spring Valley Creek @ Valencia Street/Kings View Circle]
Temporal Representation:	Data was collected over the time period 6/24/2003-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49694, Lead
Spring Valley Creek**

Region 9

LOE ID:	77135
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Lead.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd. - 909SWT07]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49761	Region 9
Spring Valley Creek		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 12 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49761, Malathion
Spring Valley Creek**

Region 9

LOE ID:	78188
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**Line of Evidence (LOE) for Decision ID 49761, Malathion
Spring Valley Creek**

Region 9

LOE ID:	77137
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 2 monitoring sites [Spring Valley Creek @ Valencia Street/Kings View Circle, Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 9/26/2005-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49673	Region 9
Spring Valley Creek		

Pollutant:	Methidathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the beneficial use guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49673, Methidathion
Spring Valley Creek**

Region 9

LOE ID:	77947
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**DECISION ID 49676
Spring Valley Creek**

Region 9

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49676, Methyl Parathion
Spring Valley Creek**

Region 9

LOE ID:	77950
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49735	Region 9
Spring Valley Creek		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of three samples did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of three samples did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49735, Nickel		Region 9
Spring Valley Creek		

LOE ID:	77141
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples

Data Reference:	exceed the criterion for Nickel. Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd. - 909SWT07]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49652	Region 9
Spring Valley Creek		

Pollutant:	Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49652, Parathion
Spring Valley Creek**

Region 9

LOE ID:	77951
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Parathion, Ethyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**DECISION ID 49770
Spring Valley Creek**

Region 9

Pollutant:	Phorate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample</p>

did not exceed the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49770, Phorate
Spring Valley Creek**

Region 9

LOE ID:	77952
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Pollutant:	Phosmet
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49772, Phosmet	Region 9
Spring Valley Creek	

LOE ID:	77953
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

Objective/Criterion Reference:	life (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49743	Region 9
Spring Valley Creek		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of three samples exceed the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49743, Selenium	Region 9
Spring Valley Creek	

LOE ID:	77142
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Spring Valley Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Selenium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd.]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	49748	Region 9
Spring Valley Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49748, Zinc
Spring Valley Creek**

Region 9

LOE ID:	77145
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 2 monitoring sites [Drainage Channel @ Quarry Rd. & Swap Meet Rd., Spring Valley Creek @ Valencia Street/Kings View Circle]
Temporal Representation:	Data was collected over the time period 6/24/2003-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49748, Zinc
Spring Valley Creek**

Region 9

LOE ID:	77146
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Spring Valley Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Zinc.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Valley Creek was collected at 1 monitoring site [Drainage Channel @ Quarry Rd. & Swap Meet Rd. - 909SWT07]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Helix Street Drain](#)
Water Body ID: CAR9091200020110920112136
Water Body Type: River & Stream

DECISION ID	47832	Region 9
Helix Street Drain		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47832, Cadmium	Region 9
Helix Street Drain	

LOE ID: 73806
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Helix Street Drain to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Helix Street Drain was collected at 1 monitoring site [Helix Street Drainage Next to Hwy 94]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47833	Region 9
Helix Street Drain		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47833, Chlorpyrifos

Region 9

Helix Street Drain

LOE ID:	73807
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Helix Street Drain to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Helix Street Drain was collected at 1 monitoring site [Helix Street Drainage Next to Hwy 94]
Temporal Representation:	Data was collected over the time period 6/28/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47834

Region 9

Helix Street Drain

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:

Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Six samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the California Toxics Rule Objective for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47834, Copper**Region 9****Helix Street Drain**

LOE ID: 73808

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Helix Street Drain to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Helix Street Drain was collected at 1 monitoring site [Helix Street Drainage Next to Hwy 94]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47835	Region 9
Helix Street Drain		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47835, Diazinon		Region 9
Helix Street Drain		

LOE ID:	73809
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Helix Street Drain to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Helix Street Drain was collected at 1 monitoring site [Helix Street Drainage Next to Hwy 94]
Temporal Representation:	Data was collected over the time period 6/28/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47836	Region 9
Helix Street Drain		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47836, Lead
Helix Street Drain**

Region 9

LOE ID:	73810
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Helix Street Drain to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Helix Street Drain was collected at 1 monitoring site [Helix Street Drainage Next to Hwy 94]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 47837
Helix Street Drain**

Region 9

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the Water Quality Criteria for Malathion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47837, Malathion

Region 9

Helix Street Drain

LOE ID:	73811
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Helix Street Drain to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Helix Street Drain was collected at 1 monitoring site [Helix Street Drainage Next to Hwy 94]
Temporal Representation:	Data was collected over the time period 6/28/2006-6/16/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47838	Region 9
Helix Street Drain		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the California Toxics Rule Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the California Toxics Rule Objective for zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47838, Zinc		Region 9
Helix Street Drain		

LOE ID:	73812
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Helix Street Drain to

	determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Helix Street Drain was collected at 1 monitoring site [Helix Street Drainage Next to Hwy 94]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [San Miguel Creek](#)
Water Body ID: CAR9091200020110920134551
Water Body Type: River & Stream

DECISION ID	49087	Region 9
San Miguel Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49087, Cadmium	Region 9
San Miguel Creek	

LOE ID: 76034

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Miguel Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguel Creek was collected at 1 monitoring site [San Miguel Creek @ Bonita Road]
Temporal Representation:	Data was collected 6/24/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49093	Region 9
San Miguel Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the criterion. The samples were not used in the assessment due to reporting limits that were above the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49093, Chlorpyrifos
San Miguel Creek**

Region 9

LOE ID:	76035
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Miguel Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Miguel Creek was collected at 1 monitoring site [San Miguel Creek @ Bonita Road]
Temporal Representation:	Data was collected over the time period 5/19/2005-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**DECISION ID 49094
San Miguel Creek**

Region 9

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49094, Copper**Region 9****San Miguel Creek**

LOE ID:	76036
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Miguel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguel Creek was collected at 1 monitoring site [San

Temporal Representation: Miguel Creek @ Bonita Road]
 Environmental Conditions: Data was collected 6/24/2003 - 6/4/2009.
 QAPP Information: Staff is not aware of any special conditions that might affect interpretation of the data.
 The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
 QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	49097	Region 9
San Miguel Creek		

Pollutant: Diazinon
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49097, Diazinon	Region 9
San Miguel Creek	

LOE ID: 76037

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Miguel Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Miguel Creek was collected at 1 monitoring site [San Miguel Creek @ Bonita Road]
Temporal Representation:	Data was collected over the time period 5/19/2005-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 49095		Region 9
San Miguel Creek		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the criterion.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of seven samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

San Miguel Creek

LOE ID:	76053
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Miguel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguel Creek was collected at 1 monitoring site [San Miguel Creek @ Bonita Road]
Temporal Representation:	Data was collected 6/24/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

49098

Region 9

San Miguel Creek

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the five</p>

samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49098, Malathion

Region 9

San Miguel Creek

LOE ID:	76054
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for San Miguel Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Miguel Creek was collected at 1 monitoring site [San Miguel Creek @ Bonita Road]
Temporal Representation:	Data was collected over the time period 5/19/2005-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49096	Region 9
San Miguel Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the criterion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the criterion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 49096, Zinc	Region 9
San Miguel Creek	

LOE ID:	76055
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for San Miguel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguel Creek was collected at 1 monitoring site [San Miguel Creek @ Bonita Road]
Temporal Representation:	Data was collected 6/24/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sweetwater Flood Control Channel](#)
Water Body ID: CAR9091200020111216093712
Water Body Type: River & Stream

DECISION ID	50056	Region 9
Sweetwater Flood Control Channel		

Pollutant: 2-Methylnaphthalene
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50056, 2-Methylnaphthalene	Region 9
Sweetwater Flood Control Channel	

LOE ID: 78373
Pollutant: 2-Methylnaphthalene
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total
Beneficial Use: Estuarine Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for 2-Methylnaphthalene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for 2-Methylnaphthalene is 201.28 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50057	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Antimony
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50057, Antimony
Sweetwater Flood Control Channel**

Region 9

LOE ID:	78374
Pollutant:	Antimony
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Antimony.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Antimony is 25 ug/g dry weight (Long and Morgan, 1990).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID 50058
Sweetwater Flood Control Channel**

Region 9

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50058, Arsenic

Region 9

Sweetwater Flood Control Channel

LOE ID:	78375
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Arsenic.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Arsenic is 70 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The Quality Assurance Project Plan from Southern California Bight was followed.
[Quality Assurance Project Plan from Southern California Bight.](#)

DECISION ID	50059	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Benzo(a)anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50059, Benzo(a)anthracene	Region 9
Sweetwater Flood Control Channel	

LOE ID:	78376
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for

Data Reference:	Benzo(a)anthracene. Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 692.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 50060 Region 9	
Sweetwater Flood Control Channel	
Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Sweetwater Flood Control Channel

LOE ID:	78377
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Cadmium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Cadmium is 4.21 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 50061

Region 9

Sweetwater Flood Control Channel

Pollutant:	Chlordane
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50061, Chlordane
Sweetwater Flood Control Channel**

Region 9

LOE ID:	78378
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Total Chlordane is 6 ng/g dry weight (Long and Morgan, 1990).
Guideline Reference:	The potential for biological effects of sediment-sorbed contaminants tested in the National Status of Trends Program. NOAA Technical Memorandum NOS OMA 52. Seattle, WA: National Oceanic and Atmospheric Administration
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Pollutant:	Chromium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 50062, Chromium	Region 9
Sweetwater Flood Control Channel	

LOE ID:	78379
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chromium.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Chromium is 370 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50064	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Chrysene (C1-C4)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 50064, Chrysene (C1-C4)	Region 9
Sweetwater Flood Control Channel	

LOE ID:	78380
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Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chrysene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Chrysene is 845.98 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50087	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

**Line of Evidence (LOE) for Decision ID 50087, Copper
Sweetwater Flood Control Channel**

Region 9

LOE ID:	78381
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Copper.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Copper is 270 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

**DECISION ID 50089
Sweetwater Flood Control Channel**

Region 9

Pollutant:	Dibenz[a,h]anthracene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50089, Dibenz[a,h]anthracene**Region 9****Sweetwater Flood Control Channel**

LOE ID:	78382
Pollutant:	Dibenz[a,h]anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Dibenzo(a, h)anthracene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Dibenzo(a, h)anthracene is 260 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management, 19, (1): 81-97

Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50091	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Endrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50091, Endrin	Region 9
Sweetwater Flood Control Channel	

LOE ID:	78383
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Endrin.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Endrin is 0.76 ug/g oc (Fairey et al., 2001).
Guideline Reference:	Technical basis for deriving sediment criteria for nonionic organic contaminants for the protection of benthic organisms by using equilibrium partitioning. EPA822-R-93-011. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50135	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant.

Enterococcus

Zero of five samples exceed the single sample objective for water contact recreation.

Fecal coliform

Zero of five samples exceed the single sample objective for water contact recreation and non-contact recreation.

Total coliform

Zero of 5 samples exceed the single sample objective for water contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Samples and exceedences are as follows:

Enterococcus

Zero of five samples exceed the single sample objective for water contact recreation.

Fecal coliform

Zero of five samples exceed the single sample objective for water contact recreation and non-contact recreation.

Total coliform

Zero of 5 samples exceed the single sample objective for water contact recreation.

The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50135, Indicator Bacteria

Region 9

Sweetwater Flood Control Channel

LOE ID: 77039

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Various Pollutants from Bight, 2008.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River]

Temporal Representation: Data was collected on a single day 7/10/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from Southern California Bight was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from Southern California Bight.](#)

Line of Evidence (LOE) for Decision ID 50135, Indicator Bacteria

Region 9

Sweetwater Flood Control Channel

LOE ID: 77040

Pollutant: Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 50135, Indicator Bacteria

Region 9

Sweetwater Flood Control Channel

LOE ID:	77023
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 50135, Indicator Bacteria	Region 9
Sweetwater Flood Control Channel	

LOE ID:	76854
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River, Sweetwater River]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50093	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 50093, Lead
Sweetwater Flood Control Channel**

Region 9

LOE ID:	78384
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Lead.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Lead is 112.18 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5

Temporal Representation:	monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Environmental Conditions:	Data was collected on a single day 7/10/2008.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The Quality Assurance Project Plan from Southern California Bight was followed. Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50095	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50095, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 9
Sweetwater Flood Control Channel	

LOE ID:	78385
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for HCH, Gamma.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for HCH, gamma(Lindane; BHC, gamma) is 0.37 ug/g oc (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50097	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Mercury
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50097, Mercury

Region 9

Sweetwater Flood Control Channel

LOE ID:	78386
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Mercury.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Mercury is 2.1 ug/g (PTI Environmental Services, 1991).
Guideline Reference:	Pollutants of concern in Puget Sound. EPA 910/9-91-003. Seattle, WA: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 50101

Region 9

Sweetwater Flood Control Channel

Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines for high molecular weight PAHs, low molecular weight PAHs, and total PAHs.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50101, PAHs (Polycyclic Aromatic Hydrocarbons)
Sweetwater Flood Control Channel**

Region 9

LOE ID:	78387
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, High molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for High molecular weight PAHs is 9600 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.

Line of Evidence (LOE) for Decision ID 50101, PAHs (Polycyclic Aromatic Hydrocarbons)**Region 9****Sweetwater Flood Control Channel**

LOE ID:	78388
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PAH, Low molecular weight.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Low molecular weight PAHs is 1442 ng/g dry weight (Long et al., 1995).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

Line of Evidence (LOE) for Decision ID 50101, PAHs (Polycyclic Aromatic Hydrocarbons)**Region 9****Sweetwater Flood Control Channel**

LOE ID:	78389
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for

Data Reference:	PAHs (Polycyclic Aromatic Hydrocarbons). Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PAHs is 1800 ug/g (Fairey et al., 2001).
Guideline Reference:	An evaluation of methods for calculating mean sediment quality guideline quotients as indicators of contamination and acute toxicity to amphipods by chemical mixtures. Environmental Toxicology and Chemistry. 20(10): 2276-2286
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 50112 Region 9	
Sweetwater Flood Control Channel	
Pollutant: Final Listing Decision: Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:	PCBs (Polychlorinated biphenyls) Do Not List on 303(d) list (TMDL required list) New Decision Revised Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Sweetwater Flood Control Channel

LOE ID:	78390
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for PCB, Total.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the sediment quality guideline (predictive of sediment toxicity for sediment-dwelling organisms) for Total PCBs is 400 ng/g (MacDonald et al., 2000b).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 50130

Region 9

Sweetwater Flood Control Channel

Pollutant:	Phenanthrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50130, Phenanthrene
Sweetwater Flood Control Channel**

Region 9

LOE ID:	78391
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Phenanthrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 543.53 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID

50131

Region 9

Sweetwater Flood Control Channel

Pollutant:	Pyrene
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50131, Pyrene

Region 9

Sweetwater Flood Control Channel

LOE ID:	78392
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Pyrene.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Pyrene is 1397.4 ng/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID 50132 Region 9	
Sweetwater Flood Control Channel	
Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50132, Silver Region 9	
Sweetwater Flood Control Channel	
LOE ID:	78371
Pollutant:	Silver

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Silver.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the probable effect level (predictive of sediment toxicity for sediment-dwelling organisms) for Silver is 1.77 ug/g dry weight (MacDonald et al., 1996).
Guideline Reference:	Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicology 5: 253-278
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

DECISION ID	50134	Region 9
Sweetwater Flood Control Channel		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceed the sediment guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the guideline and this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50134, Zinc
Sweetwater Flood Control Channel**

Region 9

LOE ID:	78372
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Bight data for Sweetwater Flood Control Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Zinc.
Data Reference:	Data for Various Pollutants from Bight, 2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In marine and estuarine sediments the effects range median (predictive of sediment toxicity for sediment-dwelling organisms) for Zinc is 410 ug/g dry weight (Long et al., 1995).
Guideline Reference:	Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuary sediments. Environmental Management. 19, (1): 81-97
Spatial Representation:	Data for this line of evidence for Sweetwater Flood Control Channel was collected at 5 monitoring sites [909_6052, 909_6057, 909_6060, 909_6065, 909_6069]
Temporal Representation:	Data was collected on a single day 7/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from Southern California Bight was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from Southern California Bight.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Long Canyon Creek \(Lower Sweetwater Watershed\)](#)
Water Body ID: CAR9091200020111216103137
Water Body Type: River & Stream

DECISION ID	48200	Region 9
Long Canyon Creek (Lower Sweetwater Watershed)		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48200, Benthic Community Effects	Region 9
Long Canyon Creek (Lower Sweetwater Watershed)	

LOE ID: 79677
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was collected from one station on Long Canyon Creek. The one samples was below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Region 9 CSCI Scores & Water Body Information
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The sample was collected at station SR-AD Long Canyon Creek.
Temporal Representation:	The sample was collected in October 2002.
Environmental Conditions:	
QAPP Information:	The data was collected under the County of San Diego NPDES MS4 Copermittees Receiving Waters Monitoring and Reporting Program.
QAPP Information Reference(s):	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008. Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

Line of Evidence (LOE) for Decision ID 48200, Benthic Community Effects

Region 9

Long Canyon Creek (Lower Sweetwater Watershed)

LOE ID:	72769
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. tr11c NPDES bioassessment

Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment
Spatial Representation:	The sample was collected at station SR-AD Long Canyon Creek.
Temporal Representation:	The sample was collected in October 2002.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	Quality Assurance Project Plan for SWAMP Bioassessment and Freshwater Bioassessment.

DECISION ID	48201	Region 9
Long Canyon Creek (Lower Sweetwater Watershed)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48201, Cadmium
Long Canyon Creek (Lower Sweetwater Watershed)**

Region 9

LOE ID: 74163

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]

Temporal Representation: Data was collected on a single day 6/24/2003 - 6/4/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 48205

Region 9

Long Canyon Creek (Lower Sweetwater Watershed)

Pollutant: Chlorpyrifos
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Zero samples exceed the Water Quality Criteria for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Zero samples exceeded the Water Quality Criteria for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48205, Chlorpyrifos
Long Canyon Creek (Lower Sweetwater Watershed)**

Region 9

LOE ID:	74164
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was

Temporal Representation:	collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]
Environmental Conditions:	Data was collected over the time period 5/19/2005-6/4/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48208	Region 9
Long Canyon Creek (Lower Sweetwater Watershed)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48208, Copper		Region 9
Long Canyon Creek (Lower Sweetwater Watershed)		

LOE ID:	74165
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]
Temporal Representation:	Data was collected on a single day 6/24/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48212	Region 9
Long Canyon Creek (Lower Sweetwater Watershed)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48212, Diazinon
Long Canyon Creek (Lower Sweetwater Watershed)

Region 9

LOE ID:	74166
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]
Temporal Representation:	Data was collected over the time period 5/19/2005-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 48221

Region 9

Long Canyon Creek (Lower Sweetwater Watershed)

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48221, Lead
Long Canyon Creek (Lower Sweetwater Watershed)**

Region 9

LOE ID:	74169
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]
Temporal Representation:	Data was collected on a single day 6/24/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

DECISION ID	48223	Region 9
Long Canyon Creek (Lower Sweetwater Watershed)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Five samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Five samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48223, Malathion	Region 9
Long Canyon Creek (Lower Sweetwater Watershed)	

LOE ID:	74170
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.

Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]
Temporal Representation:	Data was collected over the time period 5/19/2005-6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 48225		Region 9
Long Canyon Creek (Lower Sweetwater Watershed)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a Single line of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Zinc.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of Seven samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 48225, Zinc		Region 9

Long Canyon Creek (Lower Sweetwater Watershed)

LOE ID:	74172
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]
Temporal Representation:	Data was collected on a single day 6/24/2003 - 6/4/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48215

Region 9

Long Canyon Creek (Lower Sweetwater Watershed)

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Six of the Six samples exceed the Single Sample maximum Objective for Enterococcus, Four out of Six samples</p>

exceeded the Single Sample Maximum Objective for Fecal Coliform, and Three out of Six samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the Six samples exceed the Single Sample maximum Objective for Enterococcus, Four out of Six samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Three out of Six samples exceeded the Single Sample Maximum Guideline for Total Coliform, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48215, Indicator Bacteria
Long Canyon Creek (Lower Sweetwater Watershed)**

Region 9

LOE ID:	74171
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]
Temporal Representation:	Data was collected over the time period 6/24/2003-7/28/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s): Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48215, Indicator Bacteria
Long Canyon Creek (Lower Sweetwater Watershed)

Region 9

LOE ID: 74167

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Long Canyon Creek (Lower Sweetwater Watershed) to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Enterococci.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]

Temporal Representation: Data was collected over the time period 6/24/2003-7/28/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48215, Indicator Bacteria
Long Canyon Creek (Lower Sweetwater Watershed)

Region 9

LOE ID: 74168

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 4

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Long Canyon Creek (Lower

Sweetwater Watershed) to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Coliform, Fecal.

Data Reference:

[Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data:

Non-SWAMP

Water Quality Objective/Criterion:

In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference:

[Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Long Canyon Creek (Lower Sweetwater Watershed) was collected at 1 monitoring site [Long Canyon Creek @ Bonita Road near Acacia Ave.]

Temporal Representation:

Data was collected over the time period 6/24/2003-7/28/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Steele Canyon](#)
Water Body ID: CAR9092100020110812150007
Water Body Type: River & Stream

DECISION ID	52007	Region 9
Steele Canyon		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of three samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52007, Ammonia	Region 9
Steele Canyon	

LOE ID: 77155
Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 1 monitoring site [Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 6/11/2003-8/19/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49794	Region 9
Steele Canyon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the beneficial use guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of nine samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49794, Cadmium
Steele Canyon**

Region 9

LOE ID:	77157
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49794, Cadmium
Steele Canyon**

Region 9

LOE ID:	77156
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49809	Region 9
Steele Canyon		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the beneficial use guideline for Municipal and Domestic Supply and zero of zero samples exceed the criterion for aquatic life. The samples for aquatic life were not used in the assessment due to reporting limits that were higher than the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of five samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49809, Chlorpyrifos
Steele Canyon**

Region 9

LOE ID:	78189
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49809, Chlorpyrifos
Steele Canyon**

Region 9

LOE ID:	77158
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49804	Region 9
Steele Canyon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the beneficial use guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of nine samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49804, Copper

Region 9

Steele Canyon

LOE ID:	77163
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49804, Copper

Region 9

Steele Canyon

LOE ID:	77162
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49816	Region 9
Steele Canyon		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of five samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49816, Diazinon
Steele Canyon**

Region 9

LOE ID:	78190
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49816, Diazinon
Steele Canyon**

Region 9

LOE ID:	77164
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49805	Region 9
Steele Canyon		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of nine samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49805, Lead
Steele Canyon**

Region 9

LOE ID:	77167
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49805, Lead
Steele Canyon**

Region 9

LOE ID:	77168
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	49818	Region 9
Steele Canyon		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of five samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 49818, Malathion
Steele Canyon**

Region 9

LOE ID:	77169
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 49818, Malathion
Steele Canyon**

Region 9

LOE ID:	78191
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52004	Region 9
Steele Canyon		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of three samples exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of three samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52004, Nitrate/Nitrite (Nitrite + Nitrate as N)
Steele Canyon**

Region 9

LOE ID:	77170
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 1 monitoring site [Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 9/17/2003-5/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52005	Region 9
Steele Canyon		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of five samples exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 52005, Nitrogen, Nitrite
Steele Canyon**

Region 9

LOE ID:	77171
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 1 monitoring site [Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected over the time period 6/11/2003-5/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of nine samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49806, Zinc	Region 9
Steele Canyon	

LOE ID:	77173
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49806, Zinc

Region 9

Steele Canyon

LOE ID:	77174
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Steele Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94, Indian Springs Creek @ Highway 94]
Temporal Representation:	Data was collected 6/11/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence are necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant.

Enterococcus

Nine of 10 samples exceeds the single sample for water contact recreation.

Fecal coliform

Five of 10 samples exceeds the single sample for water contact recreation.

Total coliform

Two of 10 samples exceeds the single sample for water contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Samples and exceedences are as follows:

Enterococcus

Nine of 10 samples exceeds the single sample for water contact recreation.

Fecal coliform

Five of 10 samples exceeds the single sample for water contact recreation.

Total coliform

Two of 10 samples exceeds the single sample for water contact recreation.

The enterococcus and fecal coliform samples exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The total coliform sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
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LOE ID:	77165
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 9 of 10 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Indian Springs Creek @ Highway 94, Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94]
Temporal Representation:	Data was collected over the time period 6/11/2003-8/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49822, Indicator Bacteria Steele Canyon

Region 9

LOE ID:	77172
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxicsubstances in concentrations which are toxic to,or which produce detrimental physiologicalresponses in human, plant, animal, or indigenouaquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).

Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Indian Springs Creek @ Highway 94, Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94]
Temporal Representation:	Data was collected over the time period 6/11/2003-8/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 49822, Indicator Bacteria

Region 9

Steele Canyon

LOE ID:	77166
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Steele Canyon to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Steele Canyon was collected at 2 monitoring sites [Indian Springs Creek @ Highway 94, Tributary of Sweetwater River @ Millar Ranch Road south of Hwy 94]
Temporal Representation:	Data was collected over the time period 6/11/2003-8/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mexican Canyon Creek \(eastern tributary to Sweetwater River, Upper\)](#)
Water Body ID: CAR9092100020110816120152
Water Body Type: River & Stream

DECISION ID	47985	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceeded the CRITERIA for MUN which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47985, Ammonia	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)	

LOE ID: 74294

Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected on a single day 6/19/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47932	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47932, Cadmium

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74296
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47932, Cadmium

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74295
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47962	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the MUN beneficial use and zero of zero exceed the criterion for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceeded the CRITERIA for MUN and Zero of 0 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47962, Chlorpyrifos

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	78063
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47962, Chlorpyrifos

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74297
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47964	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47964, Copper

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74299
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47964, Copper

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74298
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47969	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the MUN beneficial use and zero of four exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the CRITERIA for MUN and Zero of 4 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47969, Diazinon

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	78064
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47969, Diazinon

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74300
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47965	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47965, Lead

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74303
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47965, Lead

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74304
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47982	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the MUN beneficial use and zero of four exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the CRITERIA for MUN and Zero of 4 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47982, Malathion

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74305
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47982, Malathion

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	78065
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 5/9/2006-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 47983		Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)		
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the CRITERION for protection of the MUN beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 2 samples exceeded the CRITERIA for MUN which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and	

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47983, Nitrate/Nitrite (Nitrite + Nitrate as N)

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74306
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 9/17/2003-5/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47989

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the MUN beneficial use.</p>

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the CRITERIA for MUN which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47989, Nitrogen, Nitrite

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74307
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 6/19/2003-5/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47966

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47966, Zinc**Region 9****Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)**

LOE ID: 74309

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that

Objective/Criterion Reference:	adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline: Guideline Reference:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations). Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47966, Zinc

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

LOE ID:	74310
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline: Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected 6/19/2003 - 6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47967

Region 9

Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the seven samples exceed the objective for enterococcus. Four of seven samples exceed the objective for fecal coliform and zero of seven samples exceed the objective for total coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of seven samples exceed the objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47967, Indicator Bacteria	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)	

LOE ID:	74301
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 6/19/2003-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47967, Indicator Bacteria	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)	

LOE ID:	74302
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 6/19/2003-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47967, Indicator Bacteria	Region 9
Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper)	

LOE ID:	74308
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (eastern tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Jamul Road]
Temporal Representation:	Data was collected over the time period 6/19/2003-6/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Jamacha Creek](#)
Water Body ID: CAR9092100020110816162953
Water Body Type: River & Stream

DECISION ID	47916	Region 9
Jamacha Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47916, Cadmium	Region 9
Jamacha Creek	

LOE ID: 73909
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47916, Cadmium

Region 9

Jamacha Creek

LOE ID:	73910
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47917	Region 9
Jamacha Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Evaluation Guideline for Chlorpyrifos.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47917, Chlorpyrifos	Region 9
Jamacha Creek	

LOE ID:	78041
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47917, Chlorpyrifos

Region 9

Jamacha Creek

LOE ID:	73911
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47918	Region 9
Jamacha Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Six samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Six samples exceeded the California Toxics Rule Objective for copper and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47918, Copper		Region 9
Jamacha Creek		

LOE ID:	73913
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47918, Copper

Region 9

Jamacha Creek

LOE ID:	73912
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [

Temporal Representation:	Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Environmental Conditions:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47919	Region 9
Jamacha Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Four samples exceed the Water Quality Criteria Diazinon.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Four samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47919, Diazinon	Region 9
Jamacha Creek	

LOE ID:	78042
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47919, Diazinon

Region 9

Jamacha Creek

LOE ID:	73914
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]

Temporal Representation:	Data was collected over the time period 5/1/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47922	Region 9
Jamacha Creek		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the California Toxics Rule Objective for Lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47922, Lead	Region 9
Jamacha Creek	

LOE ID:	73917
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47922, Lead

Region 9

Jamacha Creek

LOE ID:	73918
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47923	Region 9
Jamacha Creek		

Pollutant: Malathion

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47923, Malathion	Region 9
Jamacha Creek	

LOE ID: 73919

Pollutant: Malathion

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for

Data Reference:	Malathion. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47923, Malathion Jamacha Creek

Region 9

LOE ID:	78043
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 5/1/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

DECISION ID	47925	Region 9
Jamacha Creek		

Pollutant: Zinc
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

 Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Six samples exceed the California Toxics Rule for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Six samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47925, Zinc	Region 9
Jamacha Creek	

LOE ID: 73907

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 6
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47925, Zinc

Region 9

Jamacha Creek

LOE ID:	73908
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Jamacha Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected once yearly from 7/12/2004 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Five of the five samples exceed the Single Sample Maximum Objective for Enterococcus, Three out of Five samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Five out of Five samples exceeded the Single Sample Maximum Guideline for Total Coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the five samples exceed the Single Sample Maximum Objective for Enterococcus, Three out of Five samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and Five out of Five samples exceeded the Single Sample Maximum Guideline for Total Coliform, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 47920, Indicator Bacteria	Region 9
Jamacha Creek	

LOE ID:	73915
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for

Data Reference:	Enterococci. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 7/12/2004-7/31/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47920, Indicator Bacteria

Region 9

Jamacha Creek

LOE ID:	73916
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 7/12/2004-7/31/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Jamacha Creek

LOE ID:	73920
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Jamacha Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Jamacha Creek was collected at 1 monitoring site [Jamacha Creek @ Jamacha Road near Willow Glen Drive]
Temporal Representation:	Data was collected over the time period 7/12/2004-7/31/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mexican Canyon Creek \(western tributary to Sweetwater River, Upper\)](#)
Water Body ID: CAR9092100020110907113210
Water Body Type: River & Stream

DECISION ID	48005	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceeded the CRITERIA for MUN which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48005, Ammonia	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)	

LOE ID: 74311

Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected on a single day 7/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47992	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
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4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47992, Cadmium

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID:	74281
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47992, Cadmium

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID:	74282
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48007	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>One lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the MUN beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceeded the CRITERIA for MUN which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48007, Chlorpyrifos

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID:	78060
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

47994

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 47994, Copper	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)	

LOE ID:	74283
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47994, Copper	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)	

LOE ID:	74284
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47999	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:**Regional Board Conclusion:**

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the MUN beneficial use and zero of four exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the CRITERIA for MUN and Zero of 4 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47999, Diazinon**Region 9****Mexican Canyon Creek (western tributary to Sweetwater River, Upper)**

LOE ID: 78061

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater

	River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47999, Diazinon
Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID:	74285
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID
47995
Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47995, Lead

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID: 74288

Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47995, Lead	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)	

LOE ID:	74289
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48009	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final	New Decision

**Listing Decision:
Revision Status
Impairment from Pollutant or
Pollution:**

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the CRITERION for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the CRITERIA for MUN which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48009, Malathion

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID: 78062

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48006	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the CRITERION for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceeded the CRITERIA for MUN which is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48006, Nitrogen, Nitrite	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)	

LOE ID:	74290
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected on a single day 7/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47998	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the CRITERION for protection of the MUN beneficial use and zero of seven exceed the criterion for protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 7 samples exceeded the CRITERIA for MUN and Zero of 7 samples exceeded the criteria for Aquatic Life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47998, Zinc

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID:	74292
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47998, Zinc

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID:	74293
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected 7/2/2003 - 6/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48002	Region 9
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Five of the six samples exceed the objective for enterococcus. One of six samples exceed the objective for fecal coliform and two of six samples exceed the objective for total coliform.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of six samples exceed the objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 48002, Indicator Bacteria
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)**

Region 9

LOE ID:	74287
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected over the time period 7/2/2003-8/7/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 48002, Indicator Bacteria
Mexican Canyon Creek (western tributary to Sweetwater River, Upper)**

Region 9

LOE ID:	74291
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road near Jamacha Road]
Temporal Representation:	Data was collected over the time period 7/2/2003-8/7/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48002, Indicator Bacteria

Region 9

Mexican Canyon Creek (western tributary to Sweetwater River, Upper)

LOE ID:	74286
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mexican Canyon Creek (western tributary to Sweetwater River, Upper) was collected at 1 monitoring site [Mexican Canyon Creek @ Campo Road

Temporal Representation:	near Jamacha Road]
Environmental Conditions:	Data was collected over the time period 7/2/2003-8/7/2008.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Harbison Canyon](#)
Water Body ID: CAR9092300020110816134701
Water Body Type: River & Stream

DECISION ID	47750	Region 9
Harbison Canyon		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47750, Benthic Community Effects	Region 9
Harbison Canyon	

LOE ID: 73814
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 27 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 909SHAR02 (Harbison Canyon Creek 2).
Temporal Representation:	Survey done May 8, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47750, Benthic Community Effects

Region 9

Harbison Canyon

LOE ID:	79683
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample was taken one location on Harbison Canyon Creek. The CSCI score for this site is above the 0.79 threshold, and is therefore not exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in

a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.

Guideline Reference:

[The California Stream Condition Index \(CSCI\): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.](#)

Spatial Representation:

Samples were collected at the following station: 909SHAR02 (Harbison Canyon Creek 2).

Temporal Representation:

Survey done May 8, 2008.

Environmental Conditions:

QAPP Information:

Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.

QAPP Information Reference(s):

[RWB9 Status Sampling 2007 and 2008](#)

DECISION ID	47751	Region 9
Harbison Canyon		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Cadmium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Cadmium and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47751, Cadmium	Region 9
Harbison Canyon	

LOE ID: 73816

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected 6/2/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47751, Cadmium Harbison Canyon

Region 9

LOE ID:	73815
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the

Objective/Criterion Reference:	hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected 6/2/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 47752		Region 9
Harbison Canyon		
Pollutant:	Chlorpyrifos	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Evaluation Guideline for Chlorpyrifos.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the Evaluation Guideline for Chlorpyrifos and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47752, Chlorpyrifos		Region 9
Harbison Canyon		
LOE ID:	78037	
Pollutant:	Chlorpyrifos	
LOE Subgroup:	Pollutant-Water	

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47752, Chlorpyrifos Harbison Canyon

Region 9

LOE ID:	73817
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	47753	Region 9
Harbison Canyon		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Copper.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47753, Copper	Region 9
Harbison Canyon	

LOE ID:	73819
Pollutant:	Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected 6/2/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47753, Copper Harbison Canyon

Region 9

LOE ID:	73818
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected 6/2/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 47754		Region 9
Harbison Canyon		
Pollutant:	Diazinon	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Water Quality Criteria for Diazinon.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the Water Quality Criteria for Diazinon and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 47754, Diazinon		Region 9
Harbison Canyon		
LOE ID:	73820	
Pollutant:	Diazinon	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47754, Diazinon
Harbison Canyon

Region 9

LOE ID:	78039
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 47757		Region 9
Harbison Canyon		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Lead.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of seven samples exceeded the California Toxics Rule Objective for Lead and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 47757, Lead		Region 9
Harbison Canyon		
LOE ID:	73829	
Pollutant:	Lead	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected 6/2/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 47757, Lead
Harbison Canyon**

Region 9

LOE ID:	73828
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]

Temporal Representation:

Data was collected once yearly from July 2003 to June 2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	47758	Region 9
Harbison Canyon		

Pollutant: Malathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Water Quality Criteria for Malathion.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the Water Quality Criteria for Malathion and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47758, Malathion	Region 9
Harbison Canyon	

LOE ID: 73792

Pollutant: Malathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 47758, Malathion Harbison Canyon

Region 9

LOE ID:	78040
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 5/3/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48145	Region 9
Harbison Canyon		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Basin Plan Objective for Nitrogen, Nitrite.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Basin Plan Objective for Nitrogen, Nitrite and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48145, Nitrogen, Nitrite		Region 9
Harbison Canyon		

LOE ID:	73793
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 7/2/2003-7/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48146	Region 9
Harbison Canyon		

Pollutant:	Nitrogen, ammonia (Total Ammonia)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the One samples exceed the Basin Plan Objective for Nitrogen, ammonia (Total Ammonia).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of One samples exceeded the Basin Plan Objective for Nitrogen, ammonia (Total Ammonia) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

Line of Evidence (LOE) for Decision ID 48146, Nitrogen, ammonia (Total Ammonia)**Region 9****Harbison Canyon**

LOE ID:	73813
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected on a single day 7/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID**47760****Region 9****Harbison Canyon**

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the Seven samples exceed the California Toxics Rule Objective for Zinc.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Seven samples exceeded the California Toxics Rule Objective for Zinc and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 47760, Zinc
Harbison Canyon**

Region 9

LOE ID:	73796
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected once yearly from July 2003 to June 2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s): Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47760, Zinc
Harbison Canyon

Region 9

LOE ID: 73795

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Harbison Canyon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance, CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]

Temporal Representation: Data was collected once yearly from July 2003 to June 2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 47755

Region 9

Harbison Canyon

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Five of the Six samples exceed the Single Sample Maximum Objective for Enterococcus, Three out of Six samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and One out of Six samples exceeded the Single Sample Maximum Guideline for Total Coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the Six samples exceed the Single Sample Maximum Objective for Enterococcus, Three out of Six samples exceeded the Single Sample Maximum Objective for Fecal Coliform, and One out of Six samples exceeded the Single Sample Maximum Guideline for Total Coliform and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Line of Evidence (LOE) for Decision ID 47755, Indicator Bacteria
Harbison Canyon**

Region 9

LOE ID:	73794
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 7/2/2003-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47755, Indicator Bacteria
Harbison Canyon

Region 9

LOE ID: 73826

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 5

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Enterococci.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]

Temporal Representation: Data was collected over the time period 7/2/2003-8/5/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 47755, Indicator Bacteria
Harbison Canyon

Region 9

LOE ID: 73827

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Harbison Canyon to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harbison Canyon was collected at 1 monitoring site [Harbison Canyon Creek @ Collier Way near Harbison Canyon Road]
Temporal Representation:	Data was collected over the time period 7/2/2003-8/5/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Sweetwater River, North Fork, unnamed tributary at Tavern Road](#)
Water Body ID: CAR9092600020111215111039
Water Body Type: River & Stream

DECISION ID	52135	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52135, Aluminum	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID: 76878
Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52023	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Ammonia
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52023, Ammonia**Region 9****Sweetwater River, North Fork, unnamed tributary at Tavern Road**

LOE ID:	76879
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 5/14/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID**52142****Region 9****Sweetwater River, North Fork, unnamed tributary at Tavern Road**

Pollutant:	Arsenic
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the three samples exceed the beneficial use guideline for Warm Freshwater Habitat use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the three samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52142, Arsenic

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76880
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Arsenic.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

Watersheds Report was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 52142, Arsenic

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID: 76881

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Arsenic.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID

51118

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant: Azinphos-methyl (Guthion)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 51118, Azinphos-methyl (Guthion)
Sweetwater River, North Fork, unnamed tributary at Tavern Road**

Region 9

LOE ID:	78149
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for Azinphos Methyl (Guthion) for the protection of freshwater aquatic life is a maximum of 0.01 ug/l.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52136	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52136, Barium	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID:	76902
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Barium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for barium is 1 mg/L (Title 22 of the California

Objective/Criterion Reference:	Code of Regulations). Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52137	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Beryllium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52137, Beryllium	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID:	76903
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Beryllium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for beryllium is 0.004 mg/L 9 (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52148	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples and zero of three samples exceed the beneficial use guideline for Municipal and Domestic use. The samples for Municipal could not be added since the fractions are different. Zero of the ten samples exceed the beneficial use guideline for Warm Freshwater Habitat use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the seven samples and zero of three samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the ten samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52148, Cadmium

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76905
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 52148, Cadmium

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76904
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved cadmium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved cadmium is 0.0022 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 52148, Cadmium

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76906
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego. 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected 5/14/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52148, Cadmium

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76920
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected 5/14/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

51120

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the municipal and domestic supply guideline. Zero of the three samples exceed the warm freshwater habitat guideline. The samples for LOE 76921 were not used in the assessment due to reporting limits that were higher than the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the seven samples exceed the municipal and domestic supply guideline. Zero of the three samples exceed the warm freshwater habitat guideline. The samples for LOE 76921 were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

Line of Evidence (LOE) for Decision ID 51120, Chlorpyrifos		Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		
LOE ID:	76921	
Pollutant:	Chlorpyrifos	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	
Beneficial Use:	Warm Freshwater Habitat	
Number of Samples:	0	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.	
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.	
SWAMP Data:	Non-SWAMP	
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).	
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin	
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).	
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho	

[Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response, CA Department of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 5/16/2006-6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51120, Chlorpyrifos	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID: 78152

Pollutant: Chlorpyrifos

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.

Guideline Reference: [2011 Edition of the Drinking Water Standards and Health Advisories](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 51120, Chlorpyrifos	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID: 78153

Pollutant: Chlorpyrifos

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51120, Chlorpyrifos

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	78151
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L

Guideline Reference:	(Siepmann and Finlayson 2000). Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52143	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples and zero of three samples exceed the beneficial use guideline for Municipal and Domestic use. The samples for Municipal could not be added since the fractions are different. Zero of the six samples exceed the beneficial use guideline for Warm Freshwater Habitat use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six samples and zero of three samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the six samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52143, Copper	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID:	76934
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Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected 5/14/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52143, Copper

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76936
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Copper.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of

Regulations).
 Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)
 Evaluation Guideline:
 Guideline Reference:
 Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
 Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
 QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 52143, Copper	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID: 76935
 Pollutant: Copper
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved
 Beneficial Use: Municipal & Domestic Supply
 Number of Samples: 6
 Number of Exceedances: 0
 Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
 Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)
 SWAMP Data: Non-SWAMP
 Water Quality Objective/Criterion: The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
 Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)
 Evaluation Guideline:
 Guideline Reference:
 Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
 Temporal Representation: Data was collected 5/14/2003 - 6/17/2009.
 Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
 QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
 QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	51132	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		
Pollutant:	Diazinon	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the municipal and domestic supply guideline. Zero of the seven samples exceed the warm freshwater habitat guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51132, Diazinon

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID: 78159

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for diazinon is 1.4 µg/L.

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 5/16/2006-6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51132, Diazinon

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID: 78158

Pollutant: Diazinon

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.

Guideline Reference: [2011 Edition of the Drinking Water Standards and Health Advisories](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 51132, Diazinon

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID: 78157

Pollutant: Diazinon

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 51132, Diazinon

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76937
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous

concentration (Finlayson, 2004).
Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 5/16/2006-6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	51134	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant: Dimethoate
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceed the municipal and domestic supply and the warm freshwater habitat guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51134, Dimethoate	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID: 77925

Pollutant: Dimethoate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Health Services archived advisory level for dimethoate is 1 µg/L.
Guideline Reference:	CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently considered Notification Levels.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 51134, Dimethoate

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77926
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	51136	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Disulfoton
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceed the municipal and domestic supply and the warm freshwater habitat guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51136, Disulfoton		Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

LOE ID:	77928
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for disulfoton is 0.05 µg/L (US EPA 1973 guidance).
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 51136, Disulfoton

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77927
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID	51151	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant: Ethoprop
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the warm freshwater habitat guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51151, Ethoprop	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID: 77929

Pollutant: Ethoprop
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop.

Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52138	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Iron
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of three samples exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52138, Iron	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID: 76977

Pollutant: Iron
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
 Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Iron.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID	52145	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the seven samples exceed the beneficial use guideline for Warm Freshwater Habitat use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the seven samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the seven samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52145, Lead

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76979
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected 5/14/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52145, Lead

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76978
Pollutant:	Lead

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected 5/14/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51155	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the municipal and domestic supply guideline. Zero of the seven samples exceed the warm freshwater habitat guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of seven samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51155, Malathion

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	78165
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51155, Malathion

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	78167
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 51155, Malathion

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76989
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51155, Malathion

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	78164
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID 51138

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant: Methidathion
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceed the municipal and domestic supply and the warm freshwater habitat guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51138, Methidathion

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID: 77932

Pollutant: Methidathion
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 7 µg/L.

Guideline Reference: [IRIS Database Calculations \(summary\)](#)

Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 51138, Methidathion	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID:	77933
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	51153	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceed the warm freshwater habitat guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51153, Methyl Parathion**Region 9****Sweetwater River, North Fork, unnamed tributary at Tavern Road**

LOE ID:	77934
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1

Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52140	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of three samples exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52140, Nickel		Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

LOE ID:	76999
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nickel.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52021	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of one sample exceeded the objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 52021, Nitrate/Nitrite (Nitrite + Nitrate as N)	Region 9
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Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77000
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 9/15/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	52022	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of six samples exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of six samples exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52022, Nitrogen, Nitrite

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77002
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/14/2003-9/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52022, Nitrogen, Nitrite

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77001
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	51119	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the beneficial use guidelines.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the guideline. The samples were not used in the assessment due to reporting limits that were higher than the guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51119, Parathion

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77935
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Parathion, Ethyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The criterion continuous concentraion for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

51149

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant:	Phorate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one sample exceed the municipal and domestic supply and the warm freshwater habitat guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51149, Phorate**Region 9****Sweetwater River, North Fork, unnamed tributary at Tavern Road**

LOE ID:	77936
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 51149, Phorate

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID: 77937

Pollutant: Phorate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The national health advisory level for phorate is 0.7 µg/L.
Guideline Reference: [Volume I Drinking Water and Health](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected on a single day 3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID

51150

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant: Phosmet
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of one

sample exceed the municipal and domestic supply and the warm freshwater habitat guidelines.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51150, Phosmet

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77938
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77939
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 µg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

52146

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the three samples exceed the beneficial use guideline for Warm Freshwater Habitat use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the three samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52146, Selenium

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77028
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Selenium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 52146, Selenium

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77015
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Selenium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	52141	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52141, Silver

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77029
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

52144

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status
Impairment from Pollutant or
Pollution:

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples and zero of three samples exceed the beneficial use guideline for Municipal and Domestic use. The samples for Municipal could not be added since the fractions are different. Zero of the seven samples exceed the beneficial use guideline for Warm Freshwater Habitat use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the seven samples and zero of three samples exceed the beneficial use guideline for Municipal and Domestic use. Zero of the seven samples exceed the beneficial use guideline for Warm Freshwater Habitat use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision
Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52144, Zinc

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	77045
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).

Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected 5/14/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 52144, Zinc	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID:	77032
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Zinc.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 52144, Zinc	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID:	77046
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected 5/14/2003 - 6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories. Rev. 12. Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	51727	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 10 of 10, and 7 of 10 samples exceed the water quality objectives for enterococcus and fecal coliform of SSMS of 61/100ml and 400/100ml, respectively for the protection of REC-1.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Data from 2003 to 2009 show that 10 of 10, and 7 of 10 samples exceed the water quality objectives for enterococcus and fecal coliform of SSMs of 61/100ml and 400/100ml, respectively for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51727, Indicator Bacteria
Sweetwater River, North Fork, unnamed tributary at Tavern Road

Region 9

LOE ID:	76976
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/14/2003-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 51727, Indicator Bacteria
Sweetwater River, North Fork, unnamed tributary at Tavern Road

Region 9

LOE ID:	76965
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Enterococci.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 51727, Indicator Bacteria

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76967
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 51727, Indicator Bacteria
Sweetwater River, North Fork, unnamed tributary at Tavern Road

Region 9

LOE ID: 76968

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 51727, Indicator Bacteria
Sweetwater River, North Fork, unnamed tributary at Tavern Road

Region 9

LOE ID: 77030

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 51727, Indicator Bacteria	Region 9
Sweetwater River, North Fork, unnamed tributary at Tavern Road	

LOE ID:	76966
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 5/14/2003-6/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s): Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 51727, Indicator Bacteria
Sweetwater River, North Fork, unnamed tributary at Tavern Road

Region 9

LOE ID: 77031

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).

Guideline Reference: [Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.](#)

Spatial Representation: Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]

Temporal Representation: Data was collected over the time period 5/14/2003-6/17/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 52139

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

Pollutant: Manganese
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Two of three samples exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of three samples exceeded the objective, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p>

Line of Evidence (LOE) for Decision ID 52139, Manganese

Region 9

Sweetwater River, North Fork, unnamed tributary at Tavern Road

LOE ID:	76990
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Sweetwater River, North Fork, unnamed tributary at Tavern Road to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Manganese.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sweetwater River, North Fork, unnamed tributary at Tavern Road was collected at 1 monitoring site [North Fork of Sweetwater River @ Tavern Road]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Viejas Creek](#)
Water Body ID: CAR9093300020110816135529
Water Body Type: River & Stream

DECISION ID	52049	Region 9
Viejas Creek		

Pollutant: Ammonia
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one sample exceeded the guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52049, Ammonia	Region 9
Viejas Creek	

LOE ID: 77176
Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply
Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected on a single day 5/14/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50524	Region 9
Viejas Creek		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of six samples did not exceed the criterion or objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples did not exceed the criterion or objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50524, Cadmium

Region 9

Viejas Creek

LOE ID:	77178
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected 5/14/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50524, Cadmium

Region 9

Viejas Creek

LOE ID:	77177
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected 5/14/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50533	Region 9
Viejas Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples exceeded the guideline for Municipal & Domestic Supply and zero of zero samples exceeded the guideline for cold freshwater. The samples were not used in the assessment for cold freshwater due to reporting limits that were higher than the guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of four samples exceeded the guideline for Municipal & Domestic Supply. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50533, Chlorpyrifos

Region 9

Viejas Creek

LOE ID:	78192
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50533, Chlorpyrifos

Region 9

Viejas Creek

LOE ID:	77179
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50530	Region 9
Viejas Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of six samples did not exceed the criterion or guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples did not exceed the criterion or guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available
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indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50530, Copper
Viejas Creek**

Region 9

LOE ID:	77181
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected 5/14/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 50530, Copper
Viejas Creek**

Region 9

LOE ID:	77180
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected on a single day 5/14/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50545	Region 9
Viejas Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples exceeded the guideline for Municipal & Domestic Supply and one of four samples exceeded the guideline for cold freshwater.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the guideline for Municipal & Domestic Supply and one of four samples exceeded the guideline for cold freshwater. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50545, Diazinon

Region 9

Viejas Creek

LOE ID:	77182
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50545, Diazinon

Region 9

Viejas Creek

LOE ID:	78193
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50548	Region 9
Viejas Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence are necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Enterococcus Three of five samples exceed the single sample objective for water contact recreation. Fecal coliform One of five samples exceed the single sample objective for water contact recreation. Total coliform Zero of 5 samples exceed the single sample objective for water contact recreation.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Samples and exceedences are as follows: Three lines of evidence are available in the administrative record to assess this pollutant.

Enterococcus
 Three of five samples exceed the single sample objective for water contact recreation.
 Fecal coliform
 One of five samples exceed the single sample objective for water contact recreation.
 Total coliform
 Zero of 5 samples exceed the single sample objective for water contact recreation.
 The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
 4. Pursuant to section 3.1 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 50548, Indicator Bacteria
 Viejas Creek**

Region 9

LOE ID: 77184

Pollutant: Fecal Coliform
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
 Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]

Temporal Representation: Data was collected over the time period 5/14/2003-7/30/2008.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

**Line of Evidence (LOE) for Decision ID 50548, Indicator Bacteria
 Viejas Creek**

Region 9

LOE ID:	77183
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/14/2003-7/30/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50548, Indicator Bacteria

Region 9

Viejas Creek

LOE ID:	77189
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or

Objective/Criterion Reference:	which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan). Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/14/2003-7/30/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 50531		Region 9
Viejas Creek		
Pollutant:	Lead	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of six samples exceeded the criterion or guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the criterion or guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 50531, Lead		Region 9
Viejas Creek		

LOE ID: 77185

Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected 5/14/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50531, Lead
Viejas Creek

Region 9

LOE ID:	77186
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected 5/14/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 50546		Region 9
Viejas Creek		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of four samples exceeded the guideline for Municipal & Domestic Supply and zero of four samples exceeded the guideline for cold freshwater.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of four samples exceeded the guideline for Municipal & Domestic Supply and zero of four samples exceeded the guideline for cold freshwater. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 50546, Malathion	Region 9
Viejas Creek	

LOE ID:	78194
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50546, Malathion

Region 9

Viejas Creek

LOE ID:	77187
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected over the time period 5/16/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID 52045		Region 9
Viejas Creek		
Pollutant:	Nitrogen, Nitrite	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of one sample exceeded the objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sample exceeded the objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 52045, Nitrogen, Nitrite		Region 9
Viejas Creek		
LOE ID:	77188	
Pollutant:	Nitrogen, Nitrite	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected on a single day 5/14/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	50532	Region 9
Viejas Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of six samples exceeded the criterion or guideline.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the criterion or guideline and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50532, Zinc

Region 9

Viejas Creek

LOE ID:	77191
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected 5/14/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 50532, Zinc

Region 9

Viejas Creek

LOE ID:	77190
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Viejas Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Viejas Creek was collected at 1 monitoring site [Viejas Creek @ Via Viejas below Private Lake]
Temporal Representation:	Data was collected 5/14/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Olive Vista Creek](#)
Water Body ID: CAR9103300020110817160101
Water Body Type: River & Stream

DECISION ID	48305	Region 9
Olive Vista Creek		

Pollutant: Cadmium
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective for protection of the aquatic life beneficial uses. Zero of the two samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for aquatic life and zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48305, Cadmium	Region 9
Olive Vista Creek	

LOE ID: 74460
Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on 5/23/2005 and 5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48305, Cadmium

Region 9

Olive Vista Creek

LOE ID:	74459
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on 5/23/2005 and 5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48311	Region 9
Olive Vista Creek		

Pollutant:	Chlorpyrifos
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the objective for protection of the aquatic life beneficial uses. Zero of the two samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the objective for aquatic life and zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

Line of Evidence (LOE) for Decision ID 48311, Chlorpyrifos	Region 9
Olive Vista Creek	

LOE ID:	78070
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected over the time period 5/23/2005-5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48311, Chlorpyrifos

Region 9

Olive Vista Creek

LOE ID:	74461
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive

Temporal Representation:	Vista Creek @ Olive Vista Drive]
Environmental Conditions:	Data was collected over the time period 5/23/2005-5/9/2006.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48306	Region 9
Olive Vista Creek		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective for protection of the aquatic life beneficial uses. Zero of the two samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for aquatic life and zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48306, Copper		Region 9
Olive Vista Creek		

LOE ID:	74463
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on 5/23/2005 and 5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48306, Copper

Region 9

Olive Vista Creek

LOE ID:	74462
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on 5/23/2005 and 5/9/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48308	Region 9
Olive Vista Creek		

Pollutant:	Diazinon
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective for protection of the aquatic life beneficial uses. Zero of the two samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for aquatic life and zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48308, Diazinon		Region 9
Olive Vista Creek		

LOE ID:	78071
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine

Data Reference:	beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected over the time period 5/23/2005-5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48308, Diazinon

Region 9

Olive Vista Creek

LOE ID:	74464
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected over the time period 5/23/2005-5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48313	Region 9
Olive Vista Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line(s) of evidence are necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of the zero samples exceed the objective for enterococcus. One of the two samples exceed the objective for fecal coliform and zero out of two samples exceed the objective for total coliform.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the zero samples exceed the objective for enterococcus. One of the two samples exceed the objective for fecal coliform and zero out of two samples exceed the objective for total coliform. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48313, Indicator Bacteria	Region 9
Olive Vista Creek	

LOE ID:	74472
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine

Data Reference:	beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Total. Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected over the time period 5/23/2005-5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48313, Indicator Bacteria

Region 9

Olive Vista Creek

LOE ID:	74465
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected over the time period 5/23/2005-5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix

QAPP Information Reference(s): Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 48313, Indicator Bacteria
Olive Vista Creek

Region 9

LOE ID: 74466

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]

Temporal Representation: Data was collected over the time period 5/23/2005-5/9/2006.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID 48307
Olive Vista Creek

Region 9

Pollutant: Lead
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective for protection of the aquatic life beneficial uses. Zero of the two samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for aquatic life and zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48307, Lead
Olive Vista Creek**

Region 9

LOE ID:	74468
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on 5/23/2005 and 5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48307, Lead

Region 9

Olive Vista Creek

LOE ID:	74467
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on 5/23/2005 and 5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID**48309****Region 9****Olive Vista Creek**

Pollutant:	Malathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective for protection of the aquatic life beneficial uses. Zero of the two samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for aquatic life and zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48309, Malathion
Olive Vista Creek**

Region 9

LOE ID:	78072
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected over the time period 5/23/2005-5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 48309, Malathion
Olive Vista Creek**

Region 9

LOE ID: 74469

Pollutant: Malathion
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.

Guideline Reference: [2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013](#)

Spatial Representation: Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]

Temporal Representation: Data was collected over the time period 5/23/2005-5/9/2006.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

DECISION ID	48314	Region 9
Olive Vista Creek		
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective for protection of the MUN beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p>	

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48314, Nitrate/Nitrite (Nitrite + Nitrate as N)

Region 9

Olive Vista Creek

LOE ID:	74470
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on a single day 5/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID

48315

Region 9

Olive Vista Creek

Pollutant: Nitrogen, Nitrite
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: Revision Status Impairment from Pollutant or Pollution:

New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 48315, Nitrogen, Nitrite
Olive Vista Creek**

Region 9

LOE ID: 74471

Pollutant: Nitrogen, Nitrite
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.

Data Reference: [Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on a single day 5/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	48310	Region 9
Olive Vista Creek		

Pollutant:	Zinc
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line(s) of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the objective for protection of the aquatic life beneficial uses. Zero of the two samples exceed the objective for protection of the MUN beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the objective for aquatic life and zero of two samples exceeded the objective for the MUN beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 48310, Zinc		Region 9
Olive Vista Creek		

LOE ID:	74474
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]
Temporal Representation:	Data was collected on 5/23/2005 and 5/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 48310, Zinc

Region 9

Olive Vista Creek

LOE ID:	74473
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Olive Vista Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Olive Vista Creek was collected at 1 monitoring site [Olive Vista Creek @ Olive Vista Drive]

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

Data was collected on 5/23/2005 and 5/9/2006.

Staff is not aware of any special conditions that might affect interpretation of the data.

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Tijuana River, Upper \(Cottonwood Creek confluence to 1st border crossing\)](#)
Water Body ID: CAR9112100020110828192152
Water Body Type: River & Stream

DECISION ID	51774	Region 9
Tijuana River, Upper (Cottonwood Creek confluence to 1st border crossing)		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index.
4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51774, Benthic Community Effects	Region 9
Tijuana River, Upper (Cottonwood Creek confluence to 1st border crossing)	

LOE ID: 76812
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score for this water body was 14 which indicates that this water body may be considered to have impaired conditions.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 911TTJR01-Tijuana River 1.
Temporal Representation:	Surveys done May 5, 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51774, Benthic Community Effects

Region 9

Tijuana River, Upper (Cottonwood Creek confluence to 1st border crossing)

LOE ID:	79695
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One sample were taken at one station on the Tijuana River near the Cottonwood confluence. The CSCI score is below the 0.79 threshold, and therefore exceeding the water quality objective for the aquatic life beneficial use. It is important to note that the O/E portion of the CSCI for this site includes portions of the watershed that are in Mexico. The pMMI portion of the CSCI was examined for the site score. The result is less than 0.5 and thus is outside the reference distribution.
Data Reference:	RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	<p>The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.</p>
Guideline Reference:	<p>Development of a Benthic Index of Biotic Integrity (B-IBI) for Wadeable Streams in Northern Coastal California and its Application to Regional 305(b) Assessment</p>
Spatial Representation:	The samples were collected at station 911TTJR01
Temporal Representation:	The sample was collected in 2008
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project
QAPP Information Reference(s):	<p>RWB9 Status Sampling 2007 and 2008</p>

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pine Valley Creek \(Lower\)](#)
Water Body ID: CAR9113000020110816114851
Water Body Type: River & Stream

DECISION ID	53177	Region 9
Pine Valley Creek (Lower)		

Pollutant: Alkalinity as CaCO₃
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53177, Alkalinity as CaCO₃	Region 9
Pine Valley Creek (Lower)	

LOE ID: 75397

Pollutant: Alkalinity as CaCO₃
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Alkalinity as CaCO ₃ .
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The Alkalinity as CaCO ₃ criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53178		Region 9
Pine Valley Creek (Lower)		
Pollutant:	Aluminum	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and	

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53178, Aluminum
Pine Valley Creek (Lower)

Region 9

LOE ID:	75413
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for the protection of aquatic life from aluminum is the chronic continuous concentration (expressed as a 4-day average) of 87 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53178, Aluminum
Pine Valley Creek (Lower)

Region 9

LOE ID:	75399
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aluminum.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53178, Aluminum
Pine Valley Creek (Lower)

Region 9

LOE ID:	75398
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Aluminum.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for aluminum is 0.2 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	53180	Region 9
Pine Valley Creek (Lower)		

Pollutant: Arsenic
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of three sample (sediment) exceeded the evaluation guideline and zero of 5 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples (sediment) and zero of five samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53180, Arsenic	Region 9
Pine Valley Creek (Lower)	

LOE ID: 75440

Pollutant: Arsenic
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53180, Arsenic
Pine Valley Creek (Lower)

Region 9

LOE ID:	75441
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

Line of Evidence (LOE) for Decision ID 53180, Arsenic**Region 9****Pine Valley Creek (Lower)**

LOE ID: 75439

Pollutant: Arsenic
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Arsenic.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The dissolved arsenic criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater for dissolved arsenic is 0.150 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]

Temporal Representation: Data was collected on a single day 5/5/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)**Line of Evidence (LOE) for Decision ID 53180, Arsenic****Region 9****Pine Valley Creek (Lower)**

LOE ID: 75429

Pollutant: Arsenic
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine

	beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for arsenic is 0.01 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53180, Arsenic

Region 9

Pine Valley Creek (Lower)

LOE ID:	75427
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Arsenic.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354, Pine Valley Creek below Secret Cyn. Cr. - 911S02058]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

DECISION ID	53181	Region 9
Pine Valley Creek (Lower)		

Pollutant: Azinphos-methyl (Guthion)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 0 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 0 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53181, Azinphos-methyl (Guthion)	Region 9
Pine Valley Creek (Lower)	

LOE ID: 78082
Pollutant: Azinphos-methyl (Guthion)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 0
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Azinphos methyl.
Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)
SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The National Recommended Water Quality Criteria for Azinphos Methyl (Guthion) for the protection of freshwater aquatic life is a maximum of 0.01 ug/l.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	53182	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Barium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53182, Barium	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75442
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Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Barium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for barium is 1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	51720	Region 9
Pine Valley Creek (Lower)		
Pollutant:	Benthic Community Effects	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.</p> <p>Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 	

4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51720, Benthic Community Effects

Region 9

Pine Valley Creek (Lower)

LOE ID:	75443
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores for this water body were above 40 which indicates that this water body is not considered to have impaired conditions.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following stations: 911S00538-Pine Valley Creek ~2.3mi above Secret Cyn. Cr. 911S02058-Pine Valley Creek below Secret Cyn. Cr. 911S03354-Pine Valley Creek ~3.8mi above Secret Cyn. Cr.
Temporal Representation:	Surveys done May 9, 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51720, Benthic Community Effects

Region 9

Pine Valley Creek (Lower)

LOE ID:	79682
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	A total of seven stations were sampled on Pine Valley Creek and its main tributary, Indian Creek, upstream of Barrett reservoir. Zero of seven samples had CSCI score below the 0.79 threshold and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Samples were collected at the following stations: 911S02058, 911S00538, 911S03354, 911S01818, 911NCPChRx, 911TJNPC2, 911TJIND2
Temporal Representation:	Surveys done from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the Southern California Stormwater Monitoring Coalition Project.
QAPP Information Reference(s):	RWB9 Stormwater Monitoring Council CY 2009 RWB9 Status Sampling 2007 and 2008

DECISION ID	53183	Region 9
Pine Valley Creek (Lower)		
Pollutant:	Beryllium	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.	

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 1 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53183, Beryllium

Region 9

Pine Valley Creek (Lower)

LOE ID:	75454
Pollutant:	Beryllium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Beryllium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for beryllium is 0.004 mg/L 9 (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Pollutant:	Bifenthrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53185, Bifenthrin	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75456
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Bifenthrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53186	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Cadmium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of three sample (sediment) exceeded the evaluation guideline and zero of 11 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples (sediment) and zero of 11 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53186, Cadmium	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75475
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53186, Cadmium
Pine Valley Creek (Lower)

Region 9

LOE ID:	75472
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53186, Cadmium
Pine Valley Creek (Lower)

Region 9

LOE ID:	75256
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80 - 911TIJ02]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53186, Cadmium

Region 9

Pine Valley Creek (Lower)

LOE ID:	75474
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53186, Cadmium**Region 9****Pine Valley Creek (Lower)**

LOE ID:	75476
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for cadmium is 0.005 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53186, Cadmium

Region 9

Pine Valley Creek (Lower)

LOE ID:	75458
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cadmium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek below Secret Cyn. Cr. - 911S02058]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53186, Cadmium

Region 9

Pine Valley Creek (Lower)

LOE ID: 75473

Pollutant: Cadmium
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cadmium.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Cadmium to protect aquatic life in freshwater. The dissolved Cadmium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]

Temporal Representation: Data was collected on a single day 5/5/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 53187		Region 9
Pine Valley Creek (Lower)		
Pollutant:	Chloride	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53187, Chloride
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75260
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Chloride objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Lower) within the Tijuana Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53187, Chloride
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75258
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Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chloride.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The recommended secondary maximum contamination level acceptable to consumers of drinking water is 250 mg/L.
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53188		Region 9
Pine Valley Creek (Lower)		
Pollutant:	Chlorpyrifos	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 	

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53188, Chlorpyrifos
Pine Valley Creek (Lower)**

Region 9

LOE ID:	78074
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**Line of Evidence (LOE) for Decision ID 53188, Chlorpyrifos
Pine Valley Creek (Lower)**

Region 9

LOE ID:	78075
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53188, Chlorpyrifos

Region 9

Pine Valley Creek (Lower)

LOE ID:	75269
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

[of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation: Data was collected over the time period 5/2/2006-6/2/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53188, Chlorpyrifos
Pine Valley Creek (Lower)

Region 9

LOE ID: 78073

Pollutant: Chlorpyrifos

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).

Guideline Reference: [Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game \(with minor corrections to significant figures as described in Beaulaurier et al., 2005\).](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID 53190
Pine Valley Creek (Lower)

Region 9

Pollutant: Chromium

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of three sample (sediment) exceeded the evaluation guideline and zero of 5 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples (sediment) and zero of five samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53190, Chromium
Pine Valley Creek (Lower)

Region 9

LOE ID:	75271
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

Objective/Criterion Reference:	detrimental physiological responses in, human, plant, animal, or aquatic life. Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354, Pine Valley Creek below Secret Cyn. Cr. - 911S02058]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53190, Chromium

Region 9

Pine Valley Creek (Lower)

LOE ID:	75285
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chromium. Since the chromium species was not identified, the data point(s) were assessed using both the Chromium III criteria which is hardness-dependent, and the criterion continuous concentration (4-day average) to protect aquatic life in freshwater for chromium VI which is 11 ug/L and is not hardness dependent.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved chromium to protect aquatic life in freshwater. The dissolved Chromium criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

Line of Evidence (LOE) for Decision ID 53190, Chromium**Region 9****Pine Valley Creek (Lower)**

LOE ID:	75287
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80 - 911TIJ02]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53190, Chromium**Region 9****Pine Valley Creek (Lower)**

LOE ID:	75284
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chromium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for total chromium is 0.05 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53198	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Copper
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of three sample (sediment) exceeded the evaluation guideline and zero of 11 samples (water) exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples (sediment) and zero of 11 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and
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information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53198, Copper

Region 9

Pine Valley Creek (Lower)

LOE ID:	75305
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53198, Copper

Region 9

Pine Valley Creek (Lower)

LOE ID:	75304
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved copper to protect aquatic life in freshwater. The dissolved copper criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53198, Copper
Pine Valley Creek (Lower)

Region 9

LOE ID:	75303
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Copper.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]

Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53198, Copper
Pine Valley Creek (Lower)

Region 9

LOE ID:	75320
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80 - 911TIJ02]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53198, Copper
Pine Valley Creek (Lower)

Region 9

LOE ID:	75319
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53198, Copper

Region 9

Pine Valley Creek (Lower)

LOE ID:	75306
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for copper is 1.0 mg/L (Title 22 California Code of Regulations).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53198, Copper
Pine Valley Creek (Lower)

Region 9

LOE ID: 75301

Pollutant: Copper
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Copper.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference: [Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354, Pine Valley Creek below Secret Cyn. Cr. - 911S02058]

Temporal Representation: Data was collected on a single day 5/5/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID 53199

Region 9

Pine Valley Creek (Lower)

Pollutant: Cyfluthrin
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53199, Cyfluthrin
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75322
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data.
The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	53200	Region 9
Pine Valley Creek (Lower)		

Pollutant: Cyhalothrin, Lambda
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53200, Cyhalothrin, Lambda	Region 9
Pine Valley Creek (Lower)	

LOE ID: 75335

Pollutant: Cyhalothrin, Lambda
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53202	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Cypermethrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53202, Cypermethrin	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75337
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three of three sample results were not used in the assessment because the laboratory data was non-detect and the method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53205	Region 9
Pine Valley Creek (Lower)		
Pollutant:	Deltamethrin	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>	

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53205, Deltamethrin
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75339
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 53211
Pine Valley Creek (Lower)**

Region 9

Pollutant: Diazinon

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 6 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53211, Diazinon
Pine Valley Creek (Lower)

Region 9

LOE ID: 78077

Pollutant: Diazinon
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference: [2011 Edition of the Drinking Water Standards and Health Advisories](#)

Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53211, Diazinon	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75351
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53211, Diazinon	Region 9
Pine Valley Creek (Lower)	

LOE ID:	78078
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1.4 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53211, Diazinon

Region 9

Pine Valley Creek (Lower)

LOE ID:	78076
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous

concentration (Finlayson, 2004).

Guideline Reference: [Water quality for diazinon. Memorandum to J. Karkoski. Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit. CA Department of Fish and Game](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID	53215	Region 9
Pine Valley Creek (Lower)		

Pollutant: Dimethoate

Final Listing Decision: Do Not List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status: Revised

Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53215, Dimethoate	Region 9
Pine Valley Creek (Lower)	

LOE ID: 77801

Pollutant: Dimethoate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Health Services archived advisory level for dimethoate is 1 µg/L.
Guideline Reference:	CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently considered Notification Levels.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53215, Dimethoate
Pine Valley Creek (Lower)

Region 9

LOE ID:	77802
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	47237	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Disulfoton
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 one line(s) of evidence are necessary to assess the listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the one samples exceed the guideline for the protection of the MUN beneficial use and zero of one samples exceed the guideline for the protection of the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the guidelines and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 47237, Disulfoton	Region 9
Pine Valley Creek (Lower)	

LOE ID:	77804
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for disulfoton is 0.05 µg/L (US EPA 1973 guidance).
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 47237, Disulfoton
Pine Valley Creek (Lower)

Region 9

LOE ID:	77803
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.

Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
[Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID	53217	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Esfenvalerate/Fenvalerate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53217, Esfenvalerate/Fenvalerate	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75366
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for

Data Reference:	Esfenvalerate/Fenvalerate, total. RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Esfenvalerate/Fenvalerate is 0.9 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53224	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Ethoprop
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53224, Ethoprop	Region 9
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Pine Valley Creek (Lower)

LOE ID:	77805
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	53229	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Fenpropathrin
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53229, Fenpropathrin
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75377
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 53230
Pine Valley Creek (Lower)**

Region 9

Pollutant: Iron

Final Listing Decision:
Last Listing Cycle's Final Listing Decision:
Revision Status
Impairment from Pollutant or Pollution:

Do Not List on 303(d) list (TMDL required list)
New Decision

Revised
Pollutant

Regional Board Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53230, Iron
Pine Valley Creek (Lower)**

Region 9

LOE ID: 75385

Pollutant: Iron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Iron.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan for the San Diego Basin).

Objective/Criterion Reference: [Maximum Contaminant Levels for organic and inorganic chemicals. CCR](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53230, Iron	Region 9
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Pine Valley Creek (Lower)

LOE ID:	75387
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Iron.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for iron is 0.3 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53230, Iron	Region 9
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Pine Valley Creek (Lower)

LOE ID:	75386
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Iron.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Iron objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Lower) within the Tijuana Hydrologic Unit is 0.3 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53232	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Lead
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Zero of three sample (sediment) exceeded the evaluation guideline and zero of 11 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples (sediment) and zero of 11 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53232, Lead
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75404
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Lead is 0.015 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

**Line of Evidence (LOE) for Decision ID 53232, Lead
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75405
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53232, Lead

Region 9

Pine Valley Creek (Lower)

LOE ID:	75402
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80 - 911TIJ02]
Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 53232, Lead
Pine Valley Creek (Lower)

Region 9

LOE ID: 75401
Pollutant: Lead
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 3
Number of Exceedances: 0
Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Lead.
Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)
SWAMP Data: SWAMP
Water Quality Objective/Criterion: California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved lead to protect aquatic life in freshwater. The dissolved lead criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)
Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation: Data was collected on a single day 5/5/2009.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 53232, Lead
Pine Valley Creek (Lower)

Region 9

LOE ID: 75388
Pollutant: Lead
LOE Subgroup: Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Lead.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354, Pine Valley Creek below Secret Cyn. Cr. - 911S02058]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53234	Region 9
Pine Valley Creek (Lower)		
Pollutant:	Malathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollution	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 6 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and 	

confidence of the Listing Policy, the applicable beneficial use support rating.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53234, Malathion

Region 9

Pine Valley Creek (Lower)

LOE ID:	75417
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 Åµg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53234, Malathion

Region 9

Pine Valley Creek (Lower)

LOE ID:	78080
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/2/2006-6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53234, Malathion

Region 9

Pine Valley Creek (Lower)

LOE ID:	78081
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for malathion is 0.1 µg/L.

Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53234, Malathion
Pine Valley Creek (Lower)

Region 9

LOE ID:	78079
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 100 µg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID 53235
Pine Valley Creek (Lower)

Region 9

Pollutant:	Manganese
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53235, Manganese
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75419
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]

Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53235, Manganese
Pine Valley Creek (Lower)

Region 9

LOE ID:	75431
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Manganese.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Secondary MCL for manganese is 0.05 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53235, Manganese
Pine Valley Creek (Lower)

Region 9

LOE ID:	75430
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine

	beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Manganese.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Manganese objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Lower) within the Tijuana Hydrologic Unit is 0.05 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53236	Region 9
Pine Valley Creek (Lower)		
Pollutant:	Methidathion	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	
Line of Evidence (LOE) for Decision ID 53236, Methidathion		Region 9

Pine Valley Creek (Lower)

LOE ID:	77806
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 7 Åµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53236, Methidathion**Region 9****Pine Valley Creek (Lower)**

LOE ID:	77807
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database .
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report .

DECISION ID	53238	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Methyl Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
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Line of Evidence (LOE) for Decision ID 53238, Methyl Parathion	Region 9
Pine Valley Creek (Lower)	

LOE ID:	77808
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Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	53239	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Nickel
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of three sample (sediment) exceeded the evaluation guideline and zero of 5 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is</p>

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples (sediment) and zero of five samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53239, Nickel
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75444
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354, Pine Valley Creek below Secret Cyn. Cr. - 911S02058]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53239, Nickel

Region 9

Pine Valley Creek (Lower)

LOE ID:	75446
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53239, Nickel**Region 9****Pine Valley Creek (Lower)**

LOE ID:	75447
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nickel.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Nickel to

Objective/Criterion Reference:	protect aquatic life in freshwater. The dissolved Nickel criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53239, Nickel
Pine Valley Creek (Lower)

Region 9

LOE ID:	75448
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nickel is 0.1 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53239, Nickel
Pine Valley Creek (Lower)

Region 9

LOE ID:	75459
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Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California, 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80 - 911TIJ02]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	53240	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of five samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53240, Nitrate/Nitrite (Nitrite + Nitrate as N)

Region 9

Pine Valley Creek (Lower)

LOE ID:	75460
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53240, Nitrate/Nitrite (Nitrite + Nitrate as N)

Region 9

Pine Valley Creek (Lower)

LOE ID:	75461
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/1/2004-7/2/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53241	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Nitrogen, Nitrite
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 7 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 7 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53241, Nitrogen, Nitrite
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75462
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrite as N.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53241, Nitrogen, Nitrite
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75463
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/28/2003-7/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53241, Nitrogen, Nitrite
Pine Valley Creek (Lower)

Region 9

LOE ID:	75464
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

DECISION ID	53242	Region 9
Pine Valley Creek (Lower)		

Pollutant: Nitrogen, ammonia (Total Ammonia)
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

 One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53242, Nitrogen, ammonia (Total Ammonia)	Region 9
Pine Valley Creek (Lower)	

LOE ID: 75415

Pollutant: Nitrogen, ammonia (Total Ammonia)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Total.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Aquatic Life Ambient Water Quality Criteria for Ammonia " Freshwater (USEPA 2013): the 30-day rolling average concentration (criterion continuous concentration or CCC) of total ammonia nitrogen(in mg TAN/L) in freshwater are not to be exceeded more than once every three years on average. The CCC values are based on pH and temperature. The CCC formula is found on page 46 and the table of CCC values is on page 49.
Guideline Reference:	Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53242, Nitrogen, ammonia (Total Ammonia)	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75416
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53242, Nitrogen, ammonia (Total Ammonia)	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75425
Pollutant:	Nitrogen, ammonia (Total Ammonia)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/28/2003-7/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

DECISION ID	53243	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Oxygen, Dissolved
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53243, Oxygen, Dissolved
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75478
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, San Diego Basin, Cold Water Habitat Objective, Chapter III, General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration for cold water habitats shall not be reduced below 8.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:
QAPP Information Reference(s):

The SWAMP QAPP (2008) was followed.
[Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

DECISION ID	53244	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Parathion
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53244, Parathion	Region 9
Pine Valley Creek (Lower)	

LOE ID:	77809
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Parathion, Ethyl.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The criterion continuous concentraion for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	53245	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Permethrin, total
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. One of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53245, Permethrin, total	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75480
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Permethrin.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Permethrin does not exceed 0.002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53247	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Phorate
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53247, Phorate
Pine Valley Creek (Lower)**

Region 9

LOE ID:	77798
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 µg/L.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**Line of Evidence (LOE) for Decision ID 53247, Phorate
Pine Valley Creek (Lower)**

Region 9

LOE ID:	77797
Pollutant:	Phorate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	53248	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Phosmet
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53248, Phosmet
Pine Valley Creek (Lower)**

Region 9

LOE ID:	77800
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 µg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

**Line of Evidence (LOE) for Decision ID 53248, Phosmet
Pine Valley Creek (Lower)**

Region 9

LOE ID:	77799
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID	53249	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Selenium
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-
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Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53249, Selenium

Region 9

Pine Valley Creek (Lower)

LOE ID: 75272

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).

Objective/Criterion Reference: [Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 53249, Selenium

Region 9

Pine Valley Creek (Lower)

LOE ID: 75275

Pollutant: Selenium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The selenium criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.005 mg/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53249, Selenium Pine Valley Creek (Lower)

Region 9

LOE ID:	75274
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Selenium.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Pine Valley Creek (Lower)

LOE ID:	75262
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Maximum Contaminant Level for selenium in the Basin Plan is 0.01 mg/L (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID

53253

Region 9

Pine Valley Creek (Lower)

Pollutant:	Silver
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p>
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This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53253, Silver
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75290
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Silver to protect aquatic life in freshwater. The dissolved Silver criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**Line of Evidence (LOE) for Decision ID 53253, Silver
Pine Valley Creek (Lower)**

Region 9

LOE ID: 75276

Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Silver.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53253, Silver
Pine Valley Creek (Lower)

Region 9

LOE ID:	75277
Pollutant:	Silver
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Silver.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The California Secondary MCL for silver is 0.1 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected on a single day 3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

DECISION ID 53257		Region 9
Pine Valley Creek (Lower)		
Pollutant:	Specific Conductivity	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>	

Line of Evidence (LOE) for Decision ID 53257, Specific Conductivity		Region 9
Pine Valley Creek (Lower)		
LOE ID:	75291	
Pollutant:	Specific Conductivity	
LOE Subgroup:	Pollutant-Water	
Matrix:	Water	
Fraction:	None	

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for specific conductance is 900 uS/cm (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53263	Region 9
Pine Valley Creek (Lower)		
Pollutant:	Sulfates	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision	After review of the available data and information, RWQCB staff concludes that the water body-	

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53263, Sulfates

Region 9

Pine Valley Creek (Lower)

LOE ID: 75292

Pollutant: Sulfates
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Sulfate.

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for sulfate is 250 mg/L (Title 22 California Code of Regulations).

Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]

Temporal Representation: Data was collected on a single day 5/5/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): [Surface Water Ambient Monitoring Program Quality Assurance Program Plan](#)

Line of Evidence (LOE) for Decision ID 53263, Sulfates

Region 9

Pine Valley Creek (Lower)

LOE ID: 75307

Pollutant: Sulfates
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Sulfate.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Sulfate objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Lower) within the Tijuana Hydrologic Unit is 250 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	53264	Region 9
Pine Valley Creek (Lower)		
Pollutant:	Temperature, water	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Three of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of three samples exceeded the criteria and this does exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, additional data and information is available indicating that standards may be met. Two additional lines of evidence are available. <p>First, the location of the sampling and timing may not be representative of steelhead habitat utilization in San Mateo, and samples were taken as grabs. Critical information needed to assess temperatures for steelhead include growth periods (spring and fall) as well as summer daytime maximums in documented oversummering habitat.</p> <p>Second, the criteria of 21 degrees as a limit is not necessarily applicable to southern California steelhead, which have been shown to have higher temperature tolerance. See Spina Environ Biol Fish</p>	

(2007) 80:23Å–34.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53264, Temperature, water
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75308
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased more than 5Å°F above the natural receiving water temperature.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53266

Region 9

Pine Valley Creek (Lower)

Pollutant:	Total Dissolved Solids
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	<p>After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.</p>

**Line of Evidence (LOE) for Decision ID 53266, Total Dissolved Solids
Pine Valley Creek (Lower)****Region 9**

LOE ID:	75325
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Dissolved Solids objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Lower) within the Tijuana Hydrologic Unit is 500 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. -

Temporal Representation:	911S03354]
Environmental Conditions:	Data was collected on a single day 5/5/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information Reference(s):	The SWAMP QAPP (2008) was followed.
	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53266, Total Dissolved Solids
Pine Valley Creek (Lower)

Region 9

LOE ID:	75311
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dissolved Solids.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for Dissolved Solids is 500 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53267

Region 9

Pine Valley Creek (Lower)

Pollutant:	Toxicity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53267, Toxicity
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75326
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and reproduction of Ceriodaphnia dubia. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL, Significant compared to negative control based on statistical test, less than stated alpha level, AND less than the evaluation threshold (both criteria are met).
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 911S00538, 911S03354, and 911S02058.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	

QAPP Information:

Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.

QAPP Information Reference(s):

DECISION ID	53268	Region 9
Pine Valley Creek (Lower)		

Pollutant:	Turbidity
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53268, Turbidity	Region 9
Pine Valley Creek (Lower)	

LOE ID: 75328

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).

Data Reference: [RWB9 Stormwater Monitoring Council CY 2009](#)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): Table 3-2 lists objectives by Hydrologic Unit, Hydrologic Area, and Hydrologic Sub-area. The Turbidity(NTU) objective for the protection of aquatic life according to Table 3-2 for Pine Valley Creek (Lower) within the Tijuana Hydrologic Unit is 20 NTU.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 2 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53270		Region 9
Pine Valley Creek (Lower)		
Pollutant:	Zinc	
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)	
Last Listing Cycle's Final Listing Decision:	New Decision	
Revision Status	Revised	
Impairment from Pollutant or Pollution:	Pollutant	
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status; under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. Zero of three sample (sediment) exceeded the evaluation guideline and zero of 11 samples (water) exceeded the water quality objective.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three samples (sediment) and zero of 11 samples (water) exceeded the guideline/objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. 	
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.	

Line of Evidence (LOE) for Decision ID 53270, Zinc**Region 9****Pine Valley Creek (Lower)**

LOE ID:	75341
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the San Diego Basin (SDRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354, Pine Valley Creek below Secret Cyn. Cr. - 911S02058]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53270, Zinc**Region 9****Pine Valley Creek (Lower)**

LOE ID:	75342
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Zinc.

Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53270, Zinc Pine Valley Creek (Lower)

Region 9

LOE ID:	75343
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference:	Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53270, Zinc

Region 9

Pine Valley Creek (Lower)

LOE ID:	75354
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego DWM data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected 5/28/2003 - 6/2/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53270, Zinc**Region 9****Pine Valley Creek (Lower)**

LOE ID:	75353
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Zinc.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California Toxics Rule (CTR) lists criterion continuous concentrations for dissolved Zinc to protect aquatic life in freshwater. The dissolved Zinc criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 3 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538, Pine Valley Creek ~3.8mi above Secret Cyn. Cr. - 911S03354]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53270, Zinc

Region 9

Pine Valley Creek (Lower)

LOE ID:	75355
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego Dept. of Public Works data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds. 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. California Toxics Rule (CTR) lists criterion continuous concentrations (4-day average) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion.
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80 - 911TIJ02]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern

Watersheds Report was followed.
QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 53270, Zinc
Pine Valley Creek (Lower)

Region 9

LOE ID: 75344

Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. (Water Quality Control Plan, San Diego Basin).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: The California Secondary MCL for zinc is 5.0 mg/L (Title 22 California Code of Regulations).
Guideline Reference: [Secondary Maximum Contaminant Levels and Compliance. CCR title 22 section 64449.](#)

Spatial Representation: Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation: Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s): [Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

DECISION ID 53272
Pine Valley Creek (Lower)

Region 9

Pollutant: pH
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the criteria.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of two samples exceeded the criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The number of samples is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**Regional Board Decision
Recommendation:**

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

**Line of Evidence (LOE) for Decision ID 53272, pH
Pine Valley Creek (Lower)**

Region 9

LOE ID:	75261
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	RWB9 Stormwater Monitoring Council CY 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 2 monitoring sites [Pine Valley Creek below Secret Cyn. Cr. - 911S02058, Pine Valley Creek ~2.3mi above Secret Cyn. Cr. - 911S00538]
Temporal Representation:	Data was collected on a single day 5/5/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

**DECISION ID 53497
Pine Valley Creek (Lower)**

Region 9

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2025
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Conclusion:	<p>This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Four lines of evidence are available in the administrative record to assess this pollutant. Data from 2003 to 2009 show that 10 of 11 and 5 of 11 single samples exceed the water quality objectives for enterococcus and total coliform for the protection of REC-1 beneficial use.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Data from 2003 to 2009 show that 10 of 11 and 5 of 11 single samples exceed the water quality objectives for enterococcus and total coliform for the protection of REC-1 beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53497, Indicator Bacteria
Pine Valley Creek (Lower)

Region 9

LOE ID:	75373
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation:

Data was collected over the time period 5/28/2003-7/30/2008.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.](#)

Line of Evidence (LOE) for Decision ID 53497, Indicator Bacteria

Region 9

Pine Valley Creek (Lower)

LOE ID: 75374

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.

Data Reference: [Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: In waters designated for non contact recreation (REC 2), the fecal coliform concentration shall not exceed 4000 MPN/100 ml (Basin Plan).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation:

Data was collected over the time period 7/31/2008-3/31/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.

QAPP Information Reference(s):

[Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.](#)

Line of Evidence (LOE) for Decision ID 53497, Indicator Bacteria

Region 9

Pine Valley Creek (Lower)

LOE ID: 75375

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for water contact recreation (REC I), the fecal coliform concentration shall not exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53497, Indicator Bacteria

Region 9

Pine Valley Creek (Lower)

LOE ID:	75364
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]

Temporal Representation:	Data was collected over the time period 5/28/2003-7/30/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53497, Indicator Bacteria	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75363
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Enterococci.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Samples shall not exceed 61 organisms per 100 ml for enterococcus in waters designated for REC I beneficial use (Water Quality Control Plan for the San Diego Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 7/31/2008-3/31/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

Line of Evidence (LOE) for Decision ID 53497, Indicator Bacteria	Region 9
Pine Valley Creek (Lower)	

LOE ID:	75310
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Metals, Nutrients, Inorganics, Organics, Pathogens, and Pesticides from the County of San Diego, 2003-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring site [Pine Valley Creek @ Old Highway 80]
Temporal Representation:	Data was collected over the time period 5/28/2003-7/30/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8 was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the Truesdail Laboratories, Rev. 12, Enviromatrix Analytical and Dry Weather Monitoring Program Rev. 8.

Line of Evidence (LOE) for Decision ID 53497, Indicator Bacteria
Pine Valley Creek (Lower)

Region 9

LOE ID:	75309
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed County of San Diego data for Pine Valley Creek (Lower) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Nutrients from the County of San Diego Southern Watersheds, 2008-2009.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	In waters designated for water contact recreation (REC I), the total coliform concentration shall not exceed 10000 MPN/100 ml (CDPH 2006).
Guideline Reference:	Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.
Spatial Representation:	Data for this line of evidence for Pine Valley Creek (Lower) was collected at 1 monitoring

Temporal Representation:	site [Pine Valley Creek @ Old Highway 80]
Environmental Conditions:	Data was collected over the time period 7/31/2008-3/31/2009.
QAPP Information:	Staff is not aware of any special conditions that might affect interpretation of the data. The Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report was followed.
QAPP Information Reference(s):	Quality Assurance Project Plan from the CRG Marine Laboratories and Southern Watersheds Report.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Indian Creek \(San Diego County\)](#)
Water Body ID: CAR9114100020110828154029
Water Body Type: River & Stream

DECISION ID 47914 **Region 9**
Indian Creek (San Diego County)

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.9 of the Listing Policy. Under section 3.9 at least two lines of evidence are necessary to assess impairment listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the Two samples exceed the Evaluation Guideline for Benthic Community Effects.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Two samples exceeded the Evaluation Guideline for Benthic Community Effects.
4. Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list.

Line of Evidence (LOE) for Decision ID 47914, Benthic Community Effects **Region 9**
Indian Creek (San Diego County)

LOE ID: 95302
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat
Number of Samples: 2
Number of Exceedances: 0
Data and Information Type: Benthic macroinvertebrate surveys

Data Used to Assess Water Quality: Data Reference:	The scores for this water body were both greater than 0.92 indicating a reference condition RWB9 Status Sampling 2007 and 2008 Region 9 CSCI Scores & Water Body Information
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows (per the scientific paper supporting the development of the CSCI scoring tool): greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for the aquatic life beneficial use.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13 The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams. Region 9 CSCI Scores & Water Body Information
Spatial Representation:	Samples were collected at the following station: 911TJIND2 (Indian Creek 2).
Temporal Representation:	Survey done 2007 and 2008.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47914, Benthic Community Effects
Indian Creek (San Diego County)

Region 9

LOE ID:	73906
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores for this water body were 39 and 47. A score under 40 indicates that this water body may be considered to have impaired conditions so one of these scores exceeds the evaluation guideline for this water body.
Data Reference:	RWB9 Status Sampling 2007 and 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Samples were collected at the following station: 911TJIND2 (Indian Creek 2).
Temporal Representation:	Survey done June 5, 2007.
Environmental Conditions:	
QAPP Information:	Data collected following SWAMP QA protocols for the RWB9 Status Sampling 2007 and 2008 water quality monitoring project.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [De Luz Creek, unnamed tributary at De Luz Murrieta Road](#)
Water Body ID: CAR9022100020120308112123
Water Body Type: River & Stream

DECISION ID	50721	Region 9
De Luz Creek, unnamed tributary at De Luz Murrieta Road		

Pollutant: Benthic Community Effects
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this indicator. Zero of Three samples exceeded the water quality objective for Benthic-Macroinvertebrate Bio-assessments.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of Three samples exceeded the water quality objective for Benthic-Macroinvertebrate Bio-assessments and this sample size is insufficient to determine the power and confidence of the listing policy the applicable beneficial use support rating. A minimum of 16 samples are needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50721, Benthic Community Effects	Region 9
De Luz Creek, unnamed tributary at De Luz Murrieta Road	

LOE ID: 73477
Pollutant: Benthic-Macroinvertebrate Bioassessments
LOE Subgroup: Population/Community Degradation
Matrix: Water
Fraction: None
Beneficial Use: Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	None of the four samples collected had IBI scores below 40. NPDES bioassessment
Data Reference:	Data for Various Pollutants from the County of San Diego Copermittees Receiving Waters Monitoring and Reporting Program, 2001-2008.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant or animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board. Region 9 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected at station REF-DLC3, De Luz Creek.
Temporal Representation:	The samples were collected in October 2002, 2003 and 2004.
Environmental Conditions:	
QAPP Information:	The data was collected under the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan, June 25, 2009.
QAPP Information Reference(s):	e-mail clarifying QAPP information

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at Fiesta Island northwest shore](#)
Water Body ID: CAC9075200020120705141008
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49429	Region 9
Mission Bay Shoreline, at Fiesta Island northwest shore		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence are necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. For the evaluation on SSM, three of the nine samples exceed the WQO for total coliform of 230/100 ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. For the evaluation on SSM, three of the nine samples exceed the WQO for total coliform of 230/100 ml for the protection of SHELL beneficial use.
and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49429, Indicator Bacteria	Region 9
Mission Bay Shoreline, at Fiesta Island northwest shore	

LOE ID:	74351
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at Fiesta Island northwest shore to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at Fiesta Island northwest shore was collected at 1 monitoring site [Fiesta Island, NW shore]
Temporal Representation:	Data was collected over the time period 9/16/2008-3/3/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49429, Indicator Bacteria

Region 9

Mission Bay Shoreline, at Fiesta Island northwest shore

LOE ID:	77608
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Two of the four samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Fiesta Island northwest shore.

Temporal Representation:

Environmental Conditions:

QAPP Information:

QAPP Information Reference(s):

The samples were collected from September 2008 to March 2010.

The samples were collected for the beach watch program.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock](#)
Water Body ID: CAC9011400020120705133809
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49696	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Using data from 2008 to 2010, ten of the 38 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Using data from 2008 to 2010, ten of the 38 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49696, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock	

LOE ID: 74638
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 38

Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 38 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Dana Point Harbor guest dock site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49696, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock

LOE ID:	74639
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 38 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at guest dock at Dana Point Harbor site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49696, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock

LOE ID:	77598
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	145
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	18 of the 145 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock.
Temporal Representation:	The samples were collected from January 2005 through October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49696, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock

LOE ID:	74641
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 38 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Dana Point Harbor guest dock site.

Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49696, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock

LOE ID:	74640
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	60
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock to determine beneficial use support and results are as follows: 6 of 60 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock was collected at 1 monitoring site [GUEST DOCK]
Temporal Representation:	Data was collected over the time period 1/3/2008-8/26/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance](#)
Water Body ID: CAC9011400020120705134457
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49698	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Using data from 2008 to 2010, nine of the 87 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Using data from 2008 to 2010, nine of the 87 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49698, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance	

LOE ID: 74642
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 87

Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 87 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Dana Point Harbor, harbor entrance site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49698, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance

LOE ID:	74647
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	104
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance to determine beneficial use support and results are as follows: 3 of 104 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance was collected at 1 monitoring site [HARBOR ENTRANCE]
Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49698, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance

LOE ID:	74648
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 86 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Dana Point Harbor, harbor entrance site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49698, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance

LOE ID:	77599
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 86 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance.

Temporal Representation: The samples were collected from January 2008 to January 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49698, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance

LOE ID: 74643

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 86

Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality: Zero of the 86 geomeans exceeded the objective.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Samples were collected at guest dock at Dana Point Harbor, harbor entrance site.

Temporal Representation: Samples were collected from January 2008 to January 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock](#)
Water Body ID: CAC9011400020120705134834
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49699	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Thirty of the 39 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of the 39 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49699, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock	

LOE ID:	74649
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 39 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at guest dock at Dana Point Harbor, patrol dock site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49699, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock

LOE ID:	74652
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 39 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at guest dock at Dana Point Harbor, patrol dock site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49699, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock

LOE ID:	74650
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 39 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at guest dock at Dana Point Harbor, patrol dock site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49699, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock**

LOE ID:	74651
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	62
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock to determine beneficial use support and results are as follows: 11 of 62 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock was collected at 1 monitoring site [HARBOR PATROL DOCK]

Temporal Representation: Data was collected over the time period 1/3/2008-8/27/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49699, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock

LOE ID: 77600

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 39

Number of Exceedances: 30

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Thirty of the thirty-nine samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geometric mean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock.

Temporal Representation: The samples were collected from January 2008 to October 2009 and two days in August 2010.

Environmental Conditions:

QAPP Information: The samples were collected for the beach watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek](#)
Water Body ID: CAC9011200020120705104435
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49808	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Using 2008 and 2009 data, 12 of the 12 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL, and 12 of the 14 samples exceed the water quality objective for enterococcus of a SSM of 104/100ml for the use of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Using 2008 and 2009 data, 12 of the 12 samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL, and 12 of the 14 samples exceed the water quality objective for enterococcus of a SSM of 104/100ml for the use of REC-1, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49808, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek	

LOE ID: 80844
Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 14 samples exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The single sample maximum standard for enterococcus states that the enterococcus density shall not exceed 104 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Broadway Creek.
Temporal Representation:	Samples were collected from November 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49808, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek

Region 9

LOE ID:	74908
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Broadway Creek site.
Temporal Representation:	Samples were collected from November 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49808, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek

Region 9

LOE ID:	74907
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the two geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected Broadway Creek.
Temporal Representation:	Samples were collected from November 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49808, Indicator Bacteria
Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek

Region 9

LOE ID:	74925
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek was collected at 1 monitoring site [BROADWAY CREEK]

Temporal Representation:

Data was collected over the time period 11/25/2008-10/27/2009.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall](#)
Water Body ID: CAC9013000020120705131722
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49834	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall		

Pollutant:	Indicator Bacteria
Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code:	169
Date TMDL Approved by USEPA:	06/22/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

[NUMBER] lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 suggests that 39 of the 92 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 suggests that 39 of the 92 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49834, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall	

LOE ID:	74806
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 92 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 10000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49834, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall

LOE ID:	77634
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	92
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Ten of the 92 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall.
Temporal Representation:	The samples were collected from January 2008 through January 2010.
Environmental Conditions:	

QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49834, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall

LOE ID: 74803

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 92
Number of Exceedances: 39

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Thirty-nine of the 92 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the coliform density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the 10000' South Outfall site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49834, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall

LOE ID: 74804

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 92
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 92 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the 10000' South Outfall site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49834, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall

LOE ID: 74805

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 110
Number of Exceedances: 9

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall to determine beneficial use support and results are as follows: 9 of 110 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall was collected at 1 monitoring site [10000' South Outfall]
Temporal Representation: Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall](#)
Water Body ID: CAC9013000020120705105510
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49835	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that 44 of the 93 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1, and 22 of 94 samples exceed the WQO for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that 44 of the 93 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1, and 22 of 94 samples exceed the WQO for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49835, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall	

LOE ID: 74834
Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	94
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 94 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 2000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49835, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall

LOE ID:	77635
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	94
Number of Exceedances:	22
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-two of the 94 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall.

Temporal Representation: The samples were collected from January 2008 through January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49835, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall

Region 9

LOE ID: 74833

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 113
Number of Exceedances: 19

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall to determine beneficial use support and results are as follows: 19 of 113 samples exceed the criterion for Coliform, Total.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall was collected at 1 monitoring site [2000' South Outfall]
Temporal Representation: Data was collected over the time period 1/3/2008-8/27/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49835, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall

Region 9

LOE ID: 74832

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 94
Number of Exceedances: 4

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Four of the 94 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 2000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49835, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall	

LOE ID:	74807
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	44
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty-four of the 93 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the coliform density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 2000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall](#)
Water Body ID: CAC9013000020120705105910
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49836	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that 41 of the 94 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml for the protection of REC-1, and 23 of the 94 samples exceed the WQO for the total coliform of a geomean of 70/100 ml for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that 41 of the 94 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml for the protection of REC-1, and 23 of the 94 samples exceed the WQO for the total coliform of a geomean of 70/100 ml for the protection of SHELL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49836, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall	

LOE ID: 74838
Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	94
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 94 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 3000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49836, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall

LOE ID:	77636
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	94
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-three of the 94 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall.

Temporal Representation: The samples were collected from January 2008 through January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49836, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall

LOE ID: 74836

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 94
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: One of the 94 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the 3000' South Outfall site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49836, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall

LOE ID: 74837

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 112
Number of Exceedances: 15

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall to determine beneficial use support and results are as follows: 15 of 112 samples exceed the criterion for Coliform, Total.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall was collected at 1 monitoring site [3000' South Outfall]
Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49836, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall	

LOE ID:	74835
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	94
Number of Exceedances:	41
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty-one of the 94 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the coliform density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 3000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall](#)
Water Body ID: CAC9013000020120705110227
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49837	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that 35 of the 93 samples exceed the water quality objective for enterococcus (geomean) for REC-1, 19 of the 92 exceed the objective for total coliform (geomean) for SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that 35 of the 93 samples exceed the water quality objective for enterococcus (geomean) for REC-1, 19 of the 92 exceed the objective for total coliform (geomean) for SHELL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49837, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall	

LOE ID: 74859
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	110
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall to determine beneficial use support and results are as follows: 12 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall was collected at 1 monitoring site [4000' South Outfall]
Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49837, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall	

LOE ID:	77637
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	92
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Nineteen of the 92 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall.
Temporal Representation:	The samples were collected from January 2008 through January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49837, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall**

LOE ID:	74860
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 92 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 4000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49837, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall**

LOE ID:	74858
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 93 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 4000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49837, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall	

LOE ID:	74839
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	35
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty-five of the 93 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the coliform density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 4000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall](#)
Water Body ID: CAC9013000020120705130851
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49838	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that 45 of the 93 samples exceed the water quality objective for enterococcus (geomean) for REC-1, and 24 of the 92 samples exceed the objective for total coliform (geomean) for SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that 45 of the 93 samples exceed the water quality objective for enterococcus (geomean) for REC-1, and 24 of the 92 samples exceed the objective for total coliform (geomean) for SHELL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49838, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall	

LOE ID: 74864
Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 92 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 5000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49838, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall

LOE ID:	77638
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	92
Number of Exceedances:	24
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-four of the 92 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall.

Temporal Representation: The samples were collected from January 2008 through January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the beach watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49838, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall

LOE ID: 74861

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 93
Number of Exceedances: 45

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Forty-five of the 93 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the coliform density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the 5000' South Outfall site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49838, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall

LOE ID: 74862

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 93
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 93 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for fecal coliform states that the coliform density shall not

Objective/Criterion Reference: exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the 5000' South Outfall site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49838, Indicator Bacteria **Region 9**
Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall

LOE ID: 74863

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 110
Number of Exceedances: 15

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall to determine beneficial use support and results are as follows: 15 of 110 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall was collected at 1 monitoring site [5000' South Outfall]

Temporal Representation: Data was collected over the time period 1/3/2008-1/11/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall](#)
Water Body ID: CAC9013000020120705131358
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49839	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 shows that 24 of 87 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 shows that 24 of 87 samples exceed the water quality objective for enterococcus of a geomean of 35/100 ml in a 30-day period for the protection of REC-1 and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49839, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall	

LOE ID: 74865
Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	24
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-four of the 87 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the coliform density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 7500' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49839, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall

LOE ID:	74866
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 87 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 7500' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49839, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall

LOE ID:	77639
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	87
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twelve of the 87 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall.
Temporal Representation:	The samples were collected from January 2008 through January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49839, Indicator Bacteria**Region 9****Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall**

LOE ID:	74885
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 87 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the 7500' South Outfall site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49839, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall

LOE ID: 74884

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 105
Number of Exceedances: 11

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall to determine beneficial use support and results are as follows: 11 of 105 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall was collected at 1 monitoring site [7500' South Outfall]

Temporal Representation: Data was collected over the time period 1/3/2008-1/11/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach](#)
Water Body ID: CAC9012000020120705142358
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49877	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data of 2008 to 2010 show that 59 of the 93 samples exceed the water quality objective (WQO) for enterococcus (geomean) for REC-1, and 50 of the 93 samples exceed the WQO for total coliform (geomean) for SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data of 2008 to 2010 show that 59 of the 93 samples exceed the water quality objective (WQO) for enterococcus (geomean) for REC-1, and 50 of the 93 samples exceed the WQO for total coliform (geomean) for SHELL and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49877, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach	

LOE ID: 77643
Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	93
Number of Exceedances:	50
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Fifty of the 93 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach.
Temporal Representation:	The samples were collected from September 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49877, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach

LOE ID:	74778
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight nine of the 93 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the surfzone outfall site.

Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49877, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach

LOE ID: 74755

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 93
Number of Exceedances: 59

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Fifty-nine of the 93 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the SJC Mouth site.
Temporal Representation: Samples were collected from January 2008 to January 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49877, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach

LOE ID: 74757

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 111
Number of Exceedances: 39

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach to determine beneficial use support and results are as follows: 39 of 111 samples exceed the criterion for Coliform, Total.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach was collected at 1 monitoring site [Surfzone at Outfall]
Temporal Representation:	Data was collected over the time period 1/3/2008-1/11/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49877, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach	

LOE ID:	74756
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	13
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirteen of the 92 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the surfzone outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach \(near Ventura Place\)](#)
Water Body ID: CAC9075100020120705141514
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50003	Region 9
Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near Ventura Place)		

Pollutant: Indicator Bacteria
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data of 2008 to 2010 shows that zero of 145 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data of 2008 to 2010 shows that zero of 145 geomean samples exceed the water quality objective for enterococcus for the protection of REC-1 beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50003, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near Ventura Place)	

LOE ID: 75104
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None
Beneficial Use: Water Contact Recreation
Number of Samples: 144

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 144 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Belmont Park at Mission Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50003, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near Ventura Place)

LOE ID:	75103
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	152
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed bw data for Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach to determine beneficial use support and results are as follows: 4 of 152 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach was collected at 1 monitoring site [Belmont Park]
Temporal Representation:	Data was collected over the time period 1/5/2008-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50003, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near Ventura Place)

LOE ID:	75102
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	144
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 144 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Belmont Park at Mission Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50003, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near Ventura Place)

LOE ID:	75101
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 145 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Belmont Park at Mission Beach site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50003, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near Ventura Place)

LOE ID: 77676

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 144
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: One of the 144 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach

Temporal Representation: The samples were collected from January 2008 to August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Mission Bay Shoreline, at North Cove Beach at Vacation Isle](#)
Water Body ID: CAC9075200020120705142708
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49430	Region 9
Mission Bay Shoreline, at North Cove Beach at Vacation Isle		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2025
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Fifty seven of the 89 samples exceed the Water Quality Criterion for total coliform of a geomean of 70 cfu/100 ml in a 30-day period for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty seven of 89 samples exceed the Water Quality Criterion for total coliform of a geomean of 70 cfu/100 ml in a 30-day period for the protection of SHELL beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49430, Indicator Bacteria	Region 9
Mission Bay Shoreline, at North Cove Beach at Vacation Isle	

LOE ID: 74354
Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	98
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Mission Bay Shoreline, at North Cove Beach at Vacation Isle to determine beneficial use support and results are as follows: 23 of 98 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan (Basin Plan 2011)states the following: At all areas where shellfish may be harvested for human consumption, ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Bay Shoreline, at North Cove Beach at Vacation Isle was collected at 1 monitoring site [North Cove beach]
Temporal Representation:	Data was collected over the time period April 2008 to August 2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49430, Indicator Bacteria

Region 9

Mission Bay Shoreline, at North Cove Beach at Vacation Isle

LOE ID:	77609
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	89
Number of Exceedances:	57
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Fifty-seven of the 89 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan for the San Diego Basin states that at all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Mission Bay Shoreline, at Fiesta Island northwest shore.

Temporal Representation:
Environmental Conditions:
QAPP Information:
QAPP Information Reference(s):

The samples were collected from April 2008 to August 2010.

The samples were collected for the beach watch program.

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier](#)
Water Body ID: CAC9011300020120705162144
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49674	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Using the latest data, zero of the 122 samples exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five lines of evidence are available in the administrative record to assess this pollutant. Using the latest data, zero of the 122 samples exceed the Water Quality Objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49674, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier	

LOE ID:	77586
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	None of the 122 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier..
Temporal Representation:	The samples were collected from January 2008 through August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49674, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier

LOE ID:	74550
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	144
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed BW data for Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier to determine beneficial use support and results are as follows: 1 of 144 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier was collected at 1 monitoring site [Treasure Island Pier]
Temporal Representation:	Data was collected over the time period January 2008 through August 2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 49674, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier
Region 9

LOE ID:	74546
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 122 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the Treasure Island site.
Temporal Representation:	Samples were collected from January 2008 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the beach watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49674, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier
Region 9

LOE ID:	74545
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 122 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Treasure Island site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49674, Indicator Bacteria
Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier

Region 9

LOE ID: 74551

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 122
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 122 geomeans exceeded the objective.
Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at the Treasure Island site.
Temporal Representation: Samples were collected from January 2008 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall](#)
Water Body ID: CAC9013000020120706135545
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49833	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall		

Pollutant: Indicator Bacteria
Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
TMDL Name: Bacteria Impaired Waters I (creeks and beach shorelines)
TMDL Project Code: 169
Date TMDL Approved by USEPA: 06/22/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Data from 2008 to 2010 suggests that 36 out of 89 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1; and 21 out of 89 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Data from 2008 to 2010 suggests that 36 out of 89 samples exceed the water quality objective for enterococcus of a geomean of 35/100ml in a 30-day period for the protection of REC-1; and 21 out of 89 samples exceed the water quality objective for total coliform of a geomean of 70/100ml in a 30-day period for the protection of SHELL, and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49833, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall	

LOE ID: 74802

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 89 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 1000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49833, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall	

LOE ID:	74800
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 89 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 1000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

Line of Evidence (LOE) for Decision ID 49833, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall

Region 9

LOE ID:	74777
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	36
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty-six of the 89 geomeans exceeded the objective.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the coliform density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at the 1000' South Outfall site.
Temporal Representation:	Samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49833, Indicator Bacteria
Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall

Region 9

LOE ID:	77633
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	89
Number of Exceedances:	21
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-one of the 89 samples exceeded the objective of 70 mpn/100ml applied as a rolling 30 day geomean.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, the median total coliform density shall not exceed 70 per 100 mL. Staff applied the objective as a rolling 30 day geometric mean consistent with other state bacteria

objectives and with guidance from the National Shellfish Sanitation Program from which the objectives were taken.

Objective/Criterion Reference:

[California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

The samples were collected at Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall.

Temporal Representation:

The samples were collected from January 2008 through August 2010.

Environmental Conditions:

QAPP Information:

The samples were collected for the beach watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49833, Indicator Bacteria

Region 9

Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall

LOE ID: 74801

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 107

Number of Exceedances: 17

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall to determine beneficial use support and results are as follows: 17 of 107 samples exceed the criterion for Coliform, Total.

Data Reference: [Data for Region 9 Beach Watch.](#)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.

Objective/Criterion Reference: [California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009](#)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Data for this line of evidence for Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall was collected at 1 monitoring site [1000' South Outfall]

Temporal Representation:

Data was collected over the time period 1/3/2008-1/11/2010.

Environmental Conditions:

Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:

The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Lower Ysidora HSA, north of Santa Margarita River](#)
Water Body ID: CAC9021100020120705163350
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49879	Region 9
Pacific Ocean Shoreline, Lower Ysidora HSA, north of Santa Margarita River		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. Two of the two samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49879, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Lower Ysidora HSA, north of Santa Margarita River	

LOE ID:	74780
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Lower Ysidora HSA, north of Santa Margarita River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Lower Ysidora HSA, north of Santa Margarita River was collected at 1 monitoring site [Santa Margarita River (NR)]
Temporal Representation:	Data was collected over the time period 2/24/2010-2/25/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Otay Valley HA, north of Palm Avenue Jetty](#)
Water Body ID: CAC9102000020120705164222
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49908	Region 9
Pacific Ocean Shoreline, Otay Valley HA, north of Palm Avenue Jetty		

Pollutant:	Indicator Bacteria
Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2, one line(s) of evidence are necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of three samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of three samples exceed the water quality objective for total coliform of a SSM of 230/100ml for the protection of SHELL beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49908, Indicator Bacteria	Region 9
Pacific Ocean Shoreline, Otay Valley HA, north of Palm Avenue Jetty	

LOE ID:	74961
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean Shoreline, Otay Valley HA, north of Palm Avenue Jetty to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 9 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan states that at all areas where shellfish may be harvested for human consumption, not more than 10 percent of the samples shall exceed 230 per 100 mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean Shoreline, Otay Valley HA, north of Palm Avenue Jetty was collected at 1 monitoring site [Palm Ave]
Temporal Representation:	Data was collected over the time period 5/25/2008-5/6/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance](#)
Water Body ID: CAC9046100020120905113006
Water Body Type: Coastal & Bay Shoreline

DECISION ID 49940 **Region 9**
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance

Pollutant: Trash
Final Listing Decision: List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected Attainment Date: 2029
Implementation Action Other than TMDL: Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 03/10/07, 11/10/07 and 11/8/08 for this water body. The total weight of trash (lbs) collected on these dates was 188 and 784. Using the metric, Coastkeeper classified this water body as low and medium for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49940, Trash **Region 9**
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance

LOE ID: 74681
Pollutant: Trash
LOE Subgroup: Pollutant-Nuisance
Matrix: Not Recorded
Fraction: None
Beneficial Use: Non-Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 11/10/07 and 11/8/08 for this water body. The total weight of trash (lbs) collected on these dates was 784. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Seaside Beach - Cardiff. Two lines of evidence are being created for this water body (Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance) because cleanups that occurred at Cardiff State Beach were less than 200 meters away.
Temporal Representation:	Two cleanups occurred on 11/10/07 and 11/8/08.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49940, Trash

Region 9

Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance

LOE ID:	74682
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 3/10/07 for this water body. The total weight of trash (lbs) collected on this date was 188. However, using the metric, Coastkeeper classified this water body as low for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:

Cardiff State Beach. Two lines of evidence are being created for this water body (Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance) because cleanups that occurred at Seaside Beach - Cardiff were less than 200 meters away.

Temporal Representation:

One cleanups occurred on 3/10/07.

Environmental Conditions:

QAPP Information:

San Diego Coastkeeper QAPP was provided.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Torrey Pines State Beach, at North Beach Entrance parking lot](#)
Water Body ID: CAC9061000020120905113722
Water Body Type: Coastal & Bay Shoreline

DECISION ID 50047 **Region 9**
Pacific Ocean Shoreline, Torrey Pines State Beach, at North Beach Entrance parking lot

Pollutant: Trash
Final Listing Decision: List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Sources: Source Unknown
Expected Attainment Date: 2029
Implementation Action Other than TMDL: Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution: Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 10/13/07, 10/11/08, and 10/10/09 for this water body. The total weight of trash (lbs) collected on these dates was 825.5. Using the metric, Coastkeeper classified this water body as low for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50047, Trash **Region 9**
Pacific Ocean Shoreline, Torrey Pines State Beach, at North Beach Entrance parking lot

LOE ID: 75161
Pollutant: Trash
LOE Subgroup: Pollutant-Nuisance
Matrix: Not Recorded
Fraction: None
Beneficial Use: Non-Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 10/13/07, 10/11/08, and 10/10/09 for this water body. The total weight of trash (lbs) collected on these dates was 825.5. However, using the metric, Coastkeeper classified this water body as low for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Torrey Pines State Beach.
Temporal Representation:	Three cleanups occurred on 10/13/07, 10/11/08, and 10/10/09.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at North Lane at Windansea Beach](#)
Water Body ID: CAC9063000020120905114104
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50028	Region 9
Pacific Ocean Shoreline, Scripps HA, at North Lane at Windansea Beach		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 1/27/07 and 1/26/08 for this water body. The total weight of trash (lbs) collected on these dates was 481. Using the metric, Coastkeeper classified this water body as high for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50028, Trash	Region 9
Pacific Ocean Shoreline, Scripps HA, at North Lane at Windansea Beach	

LOE ID:	75215
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 1/27/07 and 1/26/08 for this water body. The total weight of trash (lbs) collected on these dates was 481. However, using the metric, Coastkeeper classified this water body as high for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Windansea Beach.
Temporal Representation:	Two cleanups occurred on 1/27/07 and 1/26/08.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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

Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Drive, Pacific Beach](#)
Water Body ID: CAC9063000020120905114427
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50029	Region 9
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Drive, Pacific Beach		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 8/25/07, 8/23/08, and 8/22/09 for this water body. The total weight of trash (lbs) collected on these dates was 741. Using the metric, Coastkeeper classified this water body as medium for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50029, Trash	Region 9
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Drive, Pacific Beach	

LOE ID:	75216
Pollutant:	Trash
LOE Subgroup:	Ancillary Evidence Effluent Data
Matrix:	Not Recorded
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 8/25/07, 8/23/08, and 8/22/09 for this water body. The total weight of trash (lbs) collected on these dates was 741. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Pacific Beach Drive.
Temporal Representation:	Three cleanups occurred on 8/25/07, 8/23/08, and 8/22/09.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach \(near San Fernando Place\)](#)
Water Body ID: CAC9075100020120905115032
Water Body Type: Coastal & Bay Shoreline

DECISION ID	50002	Region 9
Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near San Fernando Place)		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 10/25/08, 4/14/07, 7/26/08, 7/25/09, and 7/24/10 for this water body. The total weight of trash (lbs) collected on 10/25/08 was 123 and the total weight of trash collected on the rest of the dates was 1,121.25. Using the metric, Coastkeeper classified this water body as low and medium for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50002, Trash	Region 9
Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near San Fernando Place)	

LOE ID:	75100
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 4/14/07, 7/26/08, 7/25/09, and 7/24/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,121.25. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	South Mission Beach. Two lines of evidence are being created for this water body (Pacific Ocean Shoreline, Scripps HA, at Belmont Park, Mission Beach) because cleanups that occurred at Mission Beach - Belmont Park were less than 200 meters away.
Temporal Representation:	Four cleanups occurred on 4/14/07, 7/26/08, 7/25/09, and 7/24/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50002, Trash

Region 9

Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near San Fernando Place)

LOE ID:	75099
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	Dissolved
Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 10/25/08 for this water body. The total weight of trash (lbs) collected on this date was 123. However, using the metric, Coastkeeper classified this water body as low for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin

Evaluation Guideline:

Guideline Reference:

Spatial Representation:

Mission Beach - Belmont Park. Two lines of evidence are being created for this water body (Pacific Ocean Shoreline, Scripps HA, at Belmont Park, Mission Beach) because cleanups that occurred at South Mission Beach were less than 200 meters away.

Temporal Representation:

One cleanup occurred on 10/25/08.

Environmental Conditions:

QAPP Information:

San Diego Coastkeeper QAPP was provided.

QAPP Information Reference(s):

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Point Loma HA, at Sunset Cliffs and Froude Street](#)
Water Body ID: CAC9081000020120905115422
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49913	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Sunset Cliffs and Froude Street		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 7/27/07, 4/12/08, 4/11/09, and 4/10/2010 for this water body. The total weight of trash (lbs) collected on these dates was 3,076. However, using the metric, Coastkeeper classified this water body as severe for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49913, Trash	Region 9
Pacific Ocean Shoreline, Point Loma HA, at Sunset Cliffs and Froude Street	

LOE ID:	75018
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 7/27/07, 4/12/08, 4/11/09, and 4/10/2010 for this water body. The total weight of trash (lbs) collected on these dates was 3,076. However, using the metric, Coastkeeper classified this water body as severe for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sunset Cliffs.
Temporal Representation:	Four cleanups occurred on 7/27/07, 4/12/08, 4/11/09, and 4/10/2010.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 9 - San Diego Region

Water Body Name: [Pacific Ocean Shoreline, Coronado HA, at G Ave, Central Beach](#)
Water Body ID: CAC9101000020120905115746
Water Body Type: Coastal & Bay Shoreline

DECISION ID	49686	Region 9
Pacific Ocean Shoreline, Coronado HA, at G Ave, Central Beach		

Pollutant:	Trash
Final Listing Decision:	List on 303(d) list (being addressed by action other than TMDL)
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected Attainment Date:	2029
Implementation Action Other than TMDL:	Collected effort of public, agencies, organizations, and permittees. Methods include street sweeping, education programs on littering, installation of trash-catching devices on storm drains.
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.7 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The following information indicates that the water quality standard is not being attained: Coastkeeper cleanups occurred on 3/24/07, 3/22/08, 3/28/09, and 3/27/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,057.5. Using the metric, Coastkeeper classified this water body as medium for trash impairment. However, any trash found is an exceedance and needs to be addressed by an action other than a TMDL.
3. This process is scientifically defensible and reproducible.

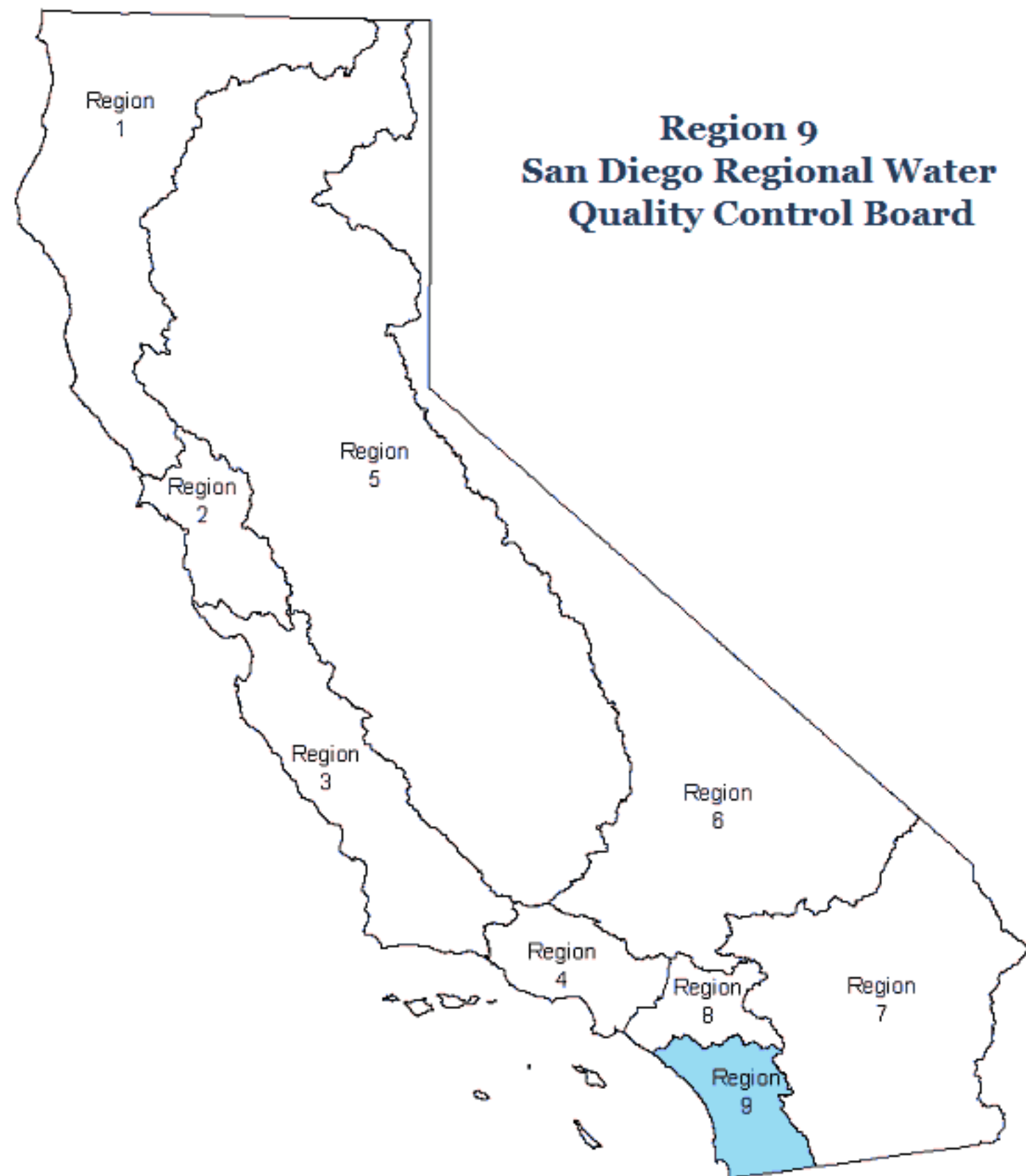
Regional Board Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49686, Trash	Region 9
Pacific Ocean Shoreline, Coronado HA, at G Ave, Central Beach	

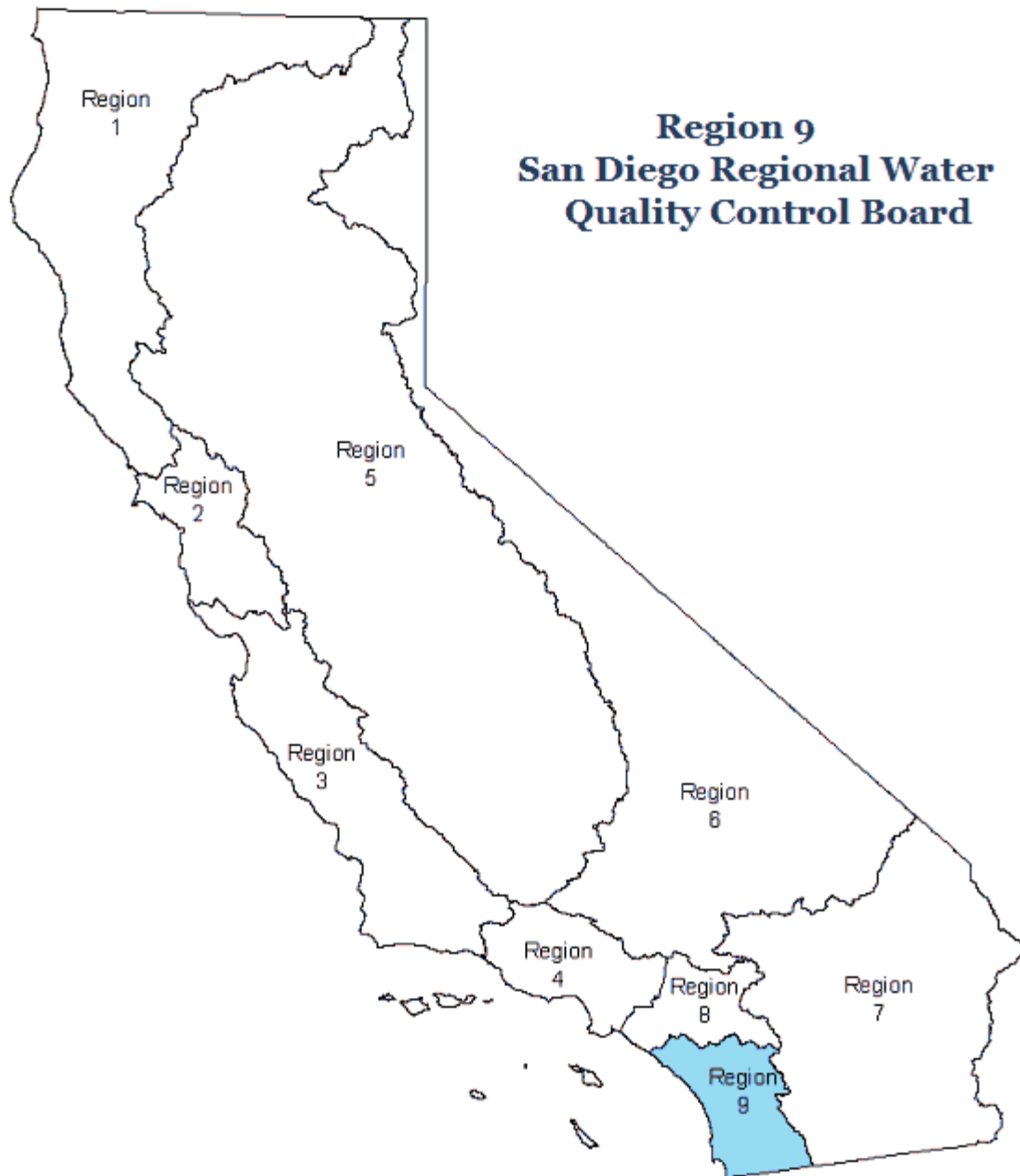
LOE ID:	74604
Pollutant:	Trash
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Not Recorded
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	The San Diego Coastkeeper conducts trash cleanups and uses a metric (pounds of trash collected per volunteer) to compare levels of trash across beaches and categorizes beaches as either low, medium, high or severe, based on this metric. Coastkeeper cleanups occurred on 3/24/07, 3/22/08, 3/28/09, and 3/27/10 for this water body. The total weight of trash (lbs) collected on these dates was 1,057.5. However, using the metric, Coastkeeper classified this water body as medium for trash impairment.
Data Reference:	Data for Trash, Nutrients, and Pathogens in Region 9, 2007-2010.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Floating Material Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the San Diego Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Coronado City Beach.
Temporal Representation:	Four cleanups occurred on 3/24/07, 3/22/08, 3/28/09, and 3/27/10.
Environmental Conditions:	
QAPP Information:	San Diego Coastkeeper QAPP was provided.
QAPP Information Reference(s):	

Region 9
San Diego Regional Water
Quality Control Board



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Draft

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

Supporting Information

REGIONAL BOARD 9 - SAN DIEGO REGION

- **New or Revised Fact Sheets**

These lines of evidence and/or decisions, which were developed during the last listing cycle, are new or have been revised.

- **Original Fact Sheets**

These lines of evidence and/or decisions were developed during the last listing cycle.

New or Revised Fact Sheets

Delist from 303(d) list (TMDL required list)

Regional Board 9

- [Agua Hedionda Lagoon](#)
 - [Indicator Bacteria \(34464\)](#)
- [Arroyo Trabuco Creek](#)
 - [Diazinon \(42259\)](#)
- [Chollas Creek](#)
 - [Cadmium \(33808\)](#)
- [Forester Creek](#)
 - [Oxygen, Dissolved \(46216\)](#)
 - [pH \(32669\)](#)
- [Long Canyon Creek \(tributary to Murrieta Creek\)](#)
 - [Indicator Bacteria \(43281\)](#)
- [Los Penasquitos Creek](#)
 - [Selenium \(43248\)](#)
- [Miramar Reservoir](#)
 - [Nitrogen \(43118\)](#)
- [Mission Bay Shoreline, at Balboa Court](#)
 - [Indicator Bacteria \(44224\)](#)

- [Mission Bay Shoreline, at Fiesta Island Bridge](#)
 - [Indicator Bacteria \(43617\)](#)
- [Mission Bay Shoreline, at Sail Bay](#)
 - [Indicator Bacteria \(44258\)](#)
- [Murray Reservoir](#)
 - [Nitrogen \(42320\)](#)
 - [pH \(33495\)](#)
- [Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - north](#)
 - [Indicator Bacteria \(44397\)](#)
- [Pacific Ocean Shoreline, Aliso HSA, at Blue Lagoon](#)
 - [Indicator Bacteria \(43054\)](#)
- [Pacific Ocean Shoreline, Buena Vista Creek HA, at Buena Vista Lagoon Outlet](#)
 - [Indicator Bacteria \(44011\)](#)
- [Pacific Ocean Shoreline, Buena Vista Creek HA, at Carlsbad State Beach at Carlsbad Village](#)
 - [Indicator Bacteria \(43662\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at South of Salt Creek outlet at Salt Creek Service Road](#)
 - [Indicator Bacteria \(43039\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Table Rock Drive](#)
 - [Indicator Bacteria \(43466\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Thousand Steps Beach](#)
 - [Indicator Bacteria \(44731\)](#)
- [Pacific Ocean Shoreline, Laguna Beach HSA, at Bluebird Canyon](#)
 - [Indicator Bacteria \(44508\)](#)
- [Pacific Ocean Shoreline, Laguna Beach HSA, at Dumond Drive at Victoria Beach](#)
 - [Indicator Bacteria \(44471\)](#)
- [Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Beach at Cleo Street](#)
 - [Indicator Bacteria \(44563\)](#)
- [Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach](#)
 - [Indicator Bacteria \(44695\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at Capistrano Shores at North Ole Hanson Beach](#)
 - [Indicator Bacteria \(43373\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at Riviera Beach](#)
 - [Indicator Bacteria \(44201\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Linda Lane](#)
 - [Indicator Bacteria \(44206\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Mariposa Lane](#)
 - [Indicator Bacteria \(44031\)](#)

- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at South Trafalgar St Beach](#)
 - [Indicator Bacteria \(44022\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Trafalgar Canyon outlet](#)
 - [Indicator Bacteria \(43497\)](#)
- [Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at Seascapes Beach Park](#)
 - [Indicator Bacteria \(43539\)](#)
- [Pacific Ocean Shoreline, San Joaquin Hills HSA, at Crescent Bay Beach](#)
 - [Indicator Bacteria \(44323\)](#)
- [Pine Valley Creek \(Upper\)](#)
 - [Turbidity \(33692\)](#)
- [Prima Deshecha Creek](#)
 - [Nickel \(43494\)](#)
- [San Vicente Creek \(San Diego County\)](#)
 - [Benthic Community Effects \(43872\)](#)
- [San Vicente Reservoir](#)
 - [Color \(42880\)](#)
 - [Nitrogen \(37158\)](#)

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

Regional Board 9

- [Pacific Ocean Shoreline, Dana Point HSA, at Aliso Beach at West Street](#)
 - [Indicator Bacteria \(44408\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach](#)
 - [Indicator Bacteria \(44415\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove](#)
 - [Indicator Bacteria \(44420\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Ravina](#)
 - [Indicator Bacteria \(43594\)](#)

Do Not Delist from 303(d) list (TMDL required list)

Regional Board 9

- [Agua Hedionda Creek](#)
 - [Selenium \(33134\)](#)
 - [Toxicity \(42896\)](#)
- [Aliso Creek](#)
 - [Selenium \(43129\)](#)
 - [Toxicity \(46397\)](#)

- [Arroyo Trabuco Creek](#)
 - [Toxicity \(42387\)](#)
- [Buena Creek](#)
 - [Nitrate and Nitrite \(33503\)](#)
- [Buena Vista Creek](#)
 - [Selenium \(42422\)](#)
- [Cottonwood Creek \(San Marcos Creek watershed\)](#)
 - [DDT \(Dichlorodiphenyltrichloroethane\) \(33515\)](#)
 - [Toxicity \(33142\)](#)
- [Cottonwood Creek \(Tijuana River watershed\)](#)
 - [Selenium \(42288\)](#)
- [Dana Point Harbor](#)
 - [Copper \(43226\)](#)
 - [Toxicity \(42684\)](#)
 - [Zinc \(42746\)](#)
- [English Canyon](#)
 - [Selenium \(43273\)](#)
 - [Toxicity \(33502\)](#)
- [Escondido Creek](#)
 - [Indicator Bacteria \(42668\)](#)
 - [Selenium \(44424\)](#)
 - [Sulfates \(34087\)](#)
 - [Toxicity \(42803\)](#)
- [Famosa Slough and Channel](#)
 - [Eutrophic \(34004\)](#)
- [Laguna Canyon Channel](#)
 - [Toxicity \(43324\)](#)
- [Loma Alta Creek](#)
 - [Selenium \(43254\)](#)
 - [Toxicity \(43222\)](#)
- [Loma Alta Slough](#)
 - [Eutrophic \(34649\)](#)
 - [Indicator Bacteria \(44598\)](#)
- [Los Penasquitos Creek](#)
 - [Toxicity \(42736\)](#)
- [Loveland Reservoir](#)
 - [Aluminum \(33045\)](#)
- [Mission Bay Shoreline, at Bahia Point](#)
 - [Indicator Bacteria \(43165\)](#)
- [Mission Bay Shoreline, at Bonita Cove](#)

- [Indicator Bacteria \(43760\)](#)
- [Mission Bay Shoreline, at Campland](#)
 - [Indicator Bacteria \(43800\)](#)
- [Mission Bay Shoreline, at De Anza Cove](#)
 - [Indicator Bacteria \(44431\)](#)
- [Mission Bay Shoreline, at Fanual Park](#)
 - [Indicator Bacteria \(44432\)](#)
- [Mission Bay Shoreline, at Leisure Lagoon](#)
 - [Indicator Bacteria \(43805\)](#)
- [Mission Bay Shoreline, at North Crown Point](#)
 - [Indicator Bacteria \(43882\)](#)
- [Mission Bay Shoreline, at Visitors Center](#)
 - [Indicator Bacteria \(43959\)](#)
- [Murrieta Creek](#)
 - [Phosphorus \(33387\)](#)
- [Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth](#)
 - [Indicator Bacteria \(43047\)](#)
- [Pacific Ocean Shoreline, Imperial Beach Pier](#)
 - [Indicator Bacteria \(43312\)](#)
- [Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth](#)
 - [Indicator Bacteria \(43811\)](#)
- [Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave](#)
 - [Indicator Bacteria \(32922\)](#)
- [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon](#)
 - [Indicator Bacteria \(43876\)](#)
- [Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet](#)
 - [Indicator Bacteria \(44426\)](#)
- [Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River](#)
 - [Indicator Bacteria \(43385\)](#)
- [Pacific Ocean Shoreline, Tijuana HU, at Monument Road](#)
 - [Indicator Bacteria \(43448\)](#)
- [Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth](#)
 - [Indicator Bacteria \(43860\)](#)
- [Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive](#)
 - [Indicator Bacteria \(44227\)](#)
- [Pacific Ocean Shoreline, Tijuana HU, at the US Border](#)

- [Indicator Bacteria \(43615\)](#)
- [Prima Deshecha Creek](#)
 - [Cadmium \(36180\)](#)
- [Rainbow Creek](#)
 - [Iron \(33947\)](#)
- [Redhawk Channel](#)
 - [Indicator Bacteria \(43592\)](#)
- [Rose Creek](#)
 - [Toxicity \(43399\)](#)
- [San Diego Bay](#)
 - [PCBs \(Polychlorinated biphenyls\) \(33669\)](#)
- [San Diego Bay Shoreline, Downtown Anchorage](#)
 - [Benthic Community Effects \(35140\)](#)
- [San Diego Bay Shoreline, Tidelands Park](#)
 - [Indicator Bacteria \(44200\)](#)
- [San Diego Bay Shoreline, Vicinity of B St and Broadway Piers](#)
 - [Indicator Bacteria \(44435\)](#)
- [San Diego Bay Shoreline, at Bayside Park \(J Street\)](#)
 - [Indicator Bacteria \(43599\)](#)
- [San Diego Bay Shoreline, near Chollas Creek](#)
 - [Benthic Community Effects \(35142\)](#)
- [San Diego Bay Shoreline, near Coronado Bridge](#)
 - [Benthic Community Effects \(35211\)](#)
- [San Diego Bay Shoreline, near sub base](#)
 - [Benthic Community Effects \(43380\)](#)
- [San Diego River \(Lower\)](#)
 - [Oxygen, Dissolved \(34487\)](#)
- [San Dieguito River](#)
 - [Toxicity \(43139\)](#)
- [San Elijo Lagoon](#)
 - [Indicator Bacteria \(34573\)](#)
- [San Juan Creek](#)
 - [DDE \(Dichlorodiphenyldichloroethylene\) \(33513\)](#)
 - [Indicator Bacteria \(41422\)](#)
 - [Selenium \(43131\)](#)
 - [Toxicity \(37571\)](#)
- [San Luis Rey River, Lower \(west of Interstate 15\)](#)

- [Indicator Bacteria \(43548\)](#)
 - [Toxicity \(43691\)](#)
- [San Marcos Creek](#)
 - [DDE \(Dichlorodiphenyldichloroethylene\) \(33035\)](#)
 - [Toxicity \(34726\)](#)
- [San Vicente Creek \(San Diego County\)](#)
 - [Ammonia as Nitrogen \(43873\)](#)
 - [Toxicity \(44832\)](#)
- [Sandia Creek](#)
 - [Iron \(44568\)](#)
 - [Sulfates \(33520\)](#)
 - [Total Dissolved Solids \(43160\)](#)
- [Santa Gertrudis Creek](#)
 - [Indicator Bacteria \(44673\)](#)
- [Santa Margarita River \(Lower\)](#)
 - [Indicator Bacteria \(43092\)](#)
- [Santa Margarita River \(Upper\)](#)
 - [Toxicity \(37431\)](#)
- [Segunda Deshecha Creek](#)
 - [Toxicity \(44886\)](#)
 - [Turbidity \(34534\)](#)
- [Soledad Canyon](#)
 - [Sediment Toxicity \(34023\)](#)
- [Sweetwater River, Lower \(below Sweetwater Reservoir\)](#)
 - [Indicator Bacteria \(44311\)](#)
 - [Selenium \(44310\)](#)
 - [Toxicity \(43751\)](#)
- [Tecolote Creek](#)
 - [Cadmium \(37924\)](#)
 - [Copper \(33826\)](#)
 - [Lead \(33829\)](#)
 - [Selenium \(42796\)](#)
 - [Toxicity \(36097\)](#)
 - [Zinc \(33849\)](#)
- [Temecula Creek](#)
 - [Phosphorus \(34014\)](#)
- [Tijuana River](#)
 - [Indicator Bacteria \(44653\)](#)
 - [Selenium \(43338\)](#)
 - [Toxicity \(43056\)](#)
- [Tijuana River Estuary](#)
 - [Indicator Bacteria \(34382\)](#)
 - [Lead \(41510\)](#)

- [Warm Springs Creek \(Riverside County\)](#)
 - [Indicator Bacteria \(42792\)](#)

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

Regional Board 9

- [Aliso Creek](#)
 - [Indicator Bacteria \(46398\)](#)
- [Chollas Creek](#)
 - [Copper \(34268\)](#)
 - [Lead \(44282\)](#)
 - [Zinc \(34327\)](#)
- [Forester Creek](#)
 - [Indicator Bacteria \(34007\)](#)
- [Mission Bay Shoreline, at Tecolote Shores](#)
 - [Indicator Bacteria \(43511\)](#)
- [Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle](#)
 - [Indicator Bacteria \(43112\)](#)
- [Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach \(Cottonwood Creek outlet\)](#)
 - [Indicator Bacteria \(43762\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach](#)
 - [Indicator Bacteria \(43763\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach](#)
 - [Indicator Bacteria \(43463\)](#)
- [Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek](#)
 - [Indicator Bacteria \(43790\)](#)
- [Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground](#)
 - [Indicator Bacteria \(43665\)](#)
- [Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek](#)
 - [Indicator Bacteria \(44645\)](#)
- [Pacific Ocean Shoreline, Miramar Reservoir HA, at Los Penasquitos River mouth](#)
 - [Indicator Bacteria \(44844\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at Poche Beach](#)
 - [Indicator Bacteria \(44202\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach](#)
 - [Indicator Bacteria \(43951\)](#)
- [Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach](#)
 - [Indicator Bacteria \(44291\)](#)

- [Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach](#)
 - [Indicator Bacteria \(43899\)](#)
- [Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth](#)
 - [Indicator Bacteria \(44090\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Childrens Pool](#)
 - [Indicator Bacteria \(43824\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point , Pacific Beach](#)
 - [Indicator Bacteria \(42716\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach](#)
 - [Indicator Bacteria \(43095\)](#)
- [Rainbow Creek](#)
 - [Nitrogen \(33865\)](#)
 - [Phosphorus \(43695\)](#)
- [San Diego Bay Shoreline, Shelter Island Shoreline Park](#)
 - [Indicator Bacteria \(34011\)](#)
- [San Diego River \(Lower\)](#)
 - [Indicator Bacteria \(44931\)](#)
- [San Dieguito River](#)
 - [Indicator Bacteria \(41468\)](#)
- [Tecolote Creek](#)
 - [Indicator Bacteria \(36746\)](#)

Do Not Delist from 303(d) list (being addressed with action other than TMDL)

Regional Board 9

- [Santa Margarita Lagoon](#)
 - [Eutrophic \(34567\)](#)

Do Not List on 303(d) list (TMDL required list)

Regional Board 9

- [Adobe Creek \(Riverside County\)](#)
 - [Benthic Community Effects \(48723\)](#)
 - [Indicator Bacteria \(48715\)](#)
- [Agua Hedionda Creek](#)
 - [Anthracene \(47426\)](#)
 - [Antimony \(47462\)](#)
 - [Arsenic \(47425\)](#)
 - [Benzo\(a\)anthracene \(47427\)](#)
 - [Benzo\(a\)pyrene \(3,4-Benzopyrene -7-d\) \(47428\)](#)
 - [Cadmium \(47431\)](#)
 - [Chlordane \(47432\)](#)

- [Chromium \(47439\)](#)
- [Chrysene \(C1-C4\) \(47440\)](#)
- [Copper \(47441\)](#)
- [Cyfluthrin \(47443\)](#)
- [Cyhalothrin, Lambda \(47446\)](#)
- [DDD \(Dichlorodiphenyldichloroethane\) \(47449\)](#)
- [DDT \(Dichlorodiphenyltrichloroethane\) \(47451\)](#)
- [Deltamethrin \(47452\)](#)
- [Diazinon \(47453\)](#)
- [Dieldrin \(47454\)](#)
- [Endrin \(47456\)](#)
- [Esfenvalerate/Fenvalerate \(47457\)](#)
- [Fenpropathrin \(47458\)](#)
- [Fluoranthene \(47459\)](#)
- [Fluorene \(47460\)](#)
- [Lead \(47463\)](#)
- [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(47466\)](#)
- [Mercury \(47469\)](#)
- [Methyl Parathion \(47470\)](#)
- [Naphthalene \(47471\)](#)
- [Nickel \(47472\)](#)
- [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(47473\)](#)
- [Nitrogen, Nitrite \(47475\)](#)
- [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(47476\)](#)
- [PCBs \(Polychlorinated biphenyls\) \(47477\)](#)
- [Phenanthrene \(47479\)](#)
- [Pyrene \(47480\)](#)
- [Surfactants \(MBAS\) \(47481\)](#)
- [Zinc \(47482\)](#)

- [Agua Hedionda Lagoon](#)
 - [2-Methylnaphthalene \(47483\)](#)
 - [Ammonia \(Unionized\) \(47484\)](#)
 - [Antimony \(47485\)](#)
 - [Arsenic \(47491\)](#)
 - [Benzo\(a\)anthracene \(47492\)](#)
 - [Cadmium \(47495\)](#)
 - [Chlordane \(47496\)](#)
 - [Chlorpyrifos \(47506\)](#)
 - [Chromium \(47508\)](#)
 - [Chrysene \(C1-C4\) \(47509\)](#)
 - [Copper \(47510\)](#)
 - [Dibenz\[a,h\]anthracene \(47512\)](#)
 - [Dieldrin \(47513\)](#)
 - [Endosulfan \(47514\)](#)
 - [Endrin \(47515\)](#)
 - [Heptachlor epoxide \(47516\)](#)
 - [Hexachlorobenzene/ HCB \(47521\)](#)
 - [Lead \(47526\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(47527\)](#)
 - [Mercury \(47529\)](#)
 - [Mirex \(47533\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(47535\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(47559\)](#)
 - [Phenanthrene \(47560\)](#)
 - [Pyrene \(47573\)](#)
 - [Selenium \(47572\)](#)
 - [Silver \(47575\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(47576\)](#)
 - [Zinc \(47579\)](#)

- [pH \(47580\)](#)
- [Aliso Creek](#)
 - [Alkalinity as CaCO3 \(47599\)](#)
 - [Aluminum \(47600\)](#)
 - [Arsenic \(47601\)](#)
 - [Bifenthrin \(47605\)](#)
 - [Cadmium \(47606\)](#)
 - [Chloride \(47610\)](#)
 - [Chlorpyrifos \(47611\)](#)
 - [Chromium \(47612\)](#)
 - [Copper \(47617\)](#)
 - [Cyfluthrin \(47619\)](#)
 - [Cyhalothrin, Lambda \(47622\)](#)
 - [Cypermethrin \(47623\)](#)
 - [Deltamethrin \(47625\)](#)
 - [Diazinon \(33824\)](#)
 - [Esfenvalerate/Fenvalerate \(47624\)](#)
 - [Fenpropathrin \(47633\)](#)
 - [Iron \(47635\)](#)
 - [Lead \(47637\)](#)
 - [Manganese \(47704\)](#)
 - [Mercury \(47705\)](#)
 - [Nickel \(47706\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(47709\)](#)
 - [Oxygen, Dissolved \(47779\)](#)
 - [Permethrin, total \(53337\)](#)
 - [Silver \(47781\)](#)
 - [Sulfates \(47784\)](#)
 - [Total Dissolved Solids \(47786\)](#)
 - [Turbidity \(47789\)](#)
 - [Zinc \(47790\)](#)
 - [pH \(47791\)](#)
- [Aliso Creek \(mouth\)](#)
 - [Arsenic \(61526\)](#)
 - [Cadmium \(47591\)](#)
 - [Chromium \(47592\)](#)
 - [Copper \(47593\)](#)
 - [Lead \(47594\)](#)
 - [Nickel \(47595\)](#)
 - [Selenium \(47596\)](#)
 - [Silver \(47597\)](#)
 - [Zinc \(47598\)](#)
- [Alpine Creek](#)
 - [Cadmium \(48211\)](#)
 - [Chlorpyrifos \(48273\)](#)
 - [Copper \(48213\)](#)
 - [Diazinon \(48217\)](#)
 - [Lead \(48218\)](#)
 - [Malathion \(48269\)](#)
 - [Nitrogen, Nitrite \(48271\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(48270\)](#)
 - [Zinc \(48272\)](#)
- [Arroyo Trabuco Creek](#)
 - [Ammonia \(Unionized\) \(47799\)](#)
 - [Arsenic \(47800\)](#)

- [Cadmium \(47801\)](#)
- [Chlorpyrifos \(47802\)](#)
- [Chromium \(47803\)](#)
- [Copper \(47804\)](#)
- [Lead \(47805\)](#)
- [Mercury \(63087\)](#)
- [Nickel \(47808\)](#)
- [Oxygen, Dissolved \(47809\)](#)
- [Selenium \(47810\)](#)
- [Silver \(47811\)](#)
- [Temperature, water \(47812\)](#)
- [Zinc \(47813\)](#)
- [pH \(47814\)](#)

- [Batiquitos Lagoon](#)
 - [2-Methylnaphthalene \(47817\)](#)
 - [Antimony \(47818\)](#)
 - [Arsenic \(47819\)](#)
 - [Benzo\(a\)anthracene \(47820\)](#)
 - [Cadmium \(47821\)](#)
 - [Chlordane \(47822\)](#)
 - [Chromium \(47823\)](#)
 - [Chrysene \(C1-C4\) \(47824\)](#)
 - [Copper \(47825\)](#)
 - [Dibenz\[a,h\]anthracene \(47826\)](#)
 - [Endrin \(47827\)](#)
 - [Lead \(47828\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(47829\)](#)
 - [Mercury \(47830\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(47831\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(47893\)](#)
 - [Phenanthrene \(47894\)](#)
 - [Pyrene \(47895\)](#)
 - [Silver \(47897\)](#)
 - [Zinc \(47898\)](#)

- [Bell Canyon Creek](#)
 - [Ammonia \(Unionized\) \(47972\)](#)
 - [Arsenic \(47973\)](#)
 - [Benthic Community Effects \(42338\)](#)
 - [Cadmium \(47974\)](#)
 - [Chlorpyrifos \(47975\)](#)
 - [Chromium \(47976\)](#)
 - [Copper \(47978\)](#)
 - [Diazinon \(47979\)](#)
 - [Lead \(47981\)](#)
 - [Malathion \(47984\)](#)
 - [Nickel \(47987\)](#)
 - [Oxygen, Dissolved \(47988\)](#)
 - [Selenium \(47991\)](#)
 - [Silver \(47993\)](#)
 - [Temperature, water \(47996\)](#)
 - [Zinc \(47997\)](#)
 - [pH \(48000\)](#)

- [Boulder Creek \(San Diego County\)](#)
 - [Benthic Community Effects \(43879\)](#)
 - [Toxicity \(42339\)](#)

- [Buena Creek](#)
 - [Cadmium \(48030\)](#)
 - [Chlorpyrifos \(48034\)](#)
 - [Copper \(48031\)](#)
 - [Diazinon \(48035\)](#)
 - [Lead \(48032\)](#)
 - [Malathion \(48037\)](#)
 - [Nitrogen, Nitrite \(48039\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(48040\)](#)
 - [Zinc \(48033\)](#)
- [Buena Vista Creek](#)
 - [Arsenic \(48044\)](#)
 - [Cadmium \(48045\)](#)
 - [Chlorpyrifos \(48080\)](#)
 - [Chromium \(48081\)](#)
 - [Copper \(48082\)](#)
 - [Cypermethrin \(48106\)](#)
 - [Deltamethrin \(48107\)](#)
 - [Diazinon \(48084\)](#)
 - [Esfenvalerate/Fenvalerate \(48117\)](#)
 - [Lead \(48101\)](#)
 - [Malathion \(48102\)](#)
 - [Nickel \(48104\)](#)
 - [Zinc \(48105\)](#)
- [Campo Creek](#)
 - [Arsenic \(48195\)](#)
 - [Azinphos-methyl \(Guthion\) \(48226\)](#)
 - [Benthic Community Effects \(42270\)](#)
 - [Cadmium \(48197\)](#)
 - [Chlorpyrifos \(48207\)](#)
 - [Chromium \(48233\)](#)
 - [Copper \(48206\)](#)
 - [Diazinon \(48232\)](#)
 - [Dimethoate \(48234\)](#)
 - [Disulfoton \(48235\)](#)
 - [Ethoprop \(48237\)](#)
 - [Lead \(48202\)](#)
 - [Malathion \(48203\)](#)
 - [Methidathion \(48236\)](#)
 - [Methyl Parathion \(48238\)](#)
 - [Nickel \(48241\)](#)
 - [Parathion \(48943\)](#)
 - [Phorate \(48239\)](#)
 - [Phosmet \(48240\)](#)
 - [Selenium \(48242\)](#)
 - [Zinc \(48204\)](#)
- [Carroll Canyon](#)
 - [Arsenic \(48244\)](#)
 - [Bifenthrin \(48245\)](#)
 - [Cadmium \(48246\)](#)
 - [Chlorpyrifos \(48247\)](#)
 - [Chromium \(48248\)](#)
 - [Copper \(48249\)](#)
 - [Cypermethrin \(48250\)](#)
 - [Deltamethrin \(48251\)](#)
 - [Diazinon \(48252\)](#)

- [Esfenvalerate/Fenvalerate \(48253\)](#)
 - [Lead \(48254\)](#)
 - [Malathion \(48255\)](#)
 - [Nickel \(48256\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(48259\)](#)
 - [Nitrogen, Nitrite \(48260\)](#)
 - [Selenium \(48257\)](#)
 - [Zinc \(48258\)](#)
- [Casa de Oro Creek](#)
 - [Cadmium \(48264\)](#)
 - [Chlorpyrifos \(48265\)](#)
 - [Copper \(48266\)](#)
 - [Diazinon \(48267\)](#)
 - [Lead \(48268\)](#)
 - [Malathion \(48289\)](#)
 - [Zinc \(48290\)](#)
- [Cedar Creek \(San Diego County\)](#)
 - [Alkalinity as CaCO₃ \(51651\)](#)
 - [Aluminum \(51652\)](#)
 - [Arsenic \(51653\)](#)
 - [Benthic Community Effects \(42271\)](#)
 - [Bifenthrin \(51655\)](#)
 - [Cadmium \(51661\)](#)
 - [Chloride \(51662\)](#)
 - [Chromium \(51664\)](#)
 - [Copper \(51668\)](#)
 - [Cyfluthrin \(51669\)](#)
 - [Cyhalothrin, Lambda \(51670\)](#)
 - [Cypermethrin \(51673\)](#)
 - [Deltamethrin \(51675\)](#)
 - [Esfenvalerate/Fenvalerate \(51677\)](#)
 - [Fenpropathrin \(51679\)](#)
 - [Iron \(51680\)](#)
 - [Lead \(51725\)](#)
 - [Manganese \(51726\)](#)
 - [Nickel \(51728\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(51736\)](#)
 - [Nitrogen, Nitrite \(51738\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(51737\)](#)
 - [Oxygen, Dissolved \(51739\)](#)
 - [Permethrin, total \(51740\)](#)
 - [Selenium \(51743\)](#)
 - [Silver \(51744\)](#)
 - [Specific Conductivity \(51746\)](#)
 - [Sulfates \(51748\)](#)
 - [Temperature, water \(51750\)](#)
 - [Total Dissolved Solids \(51752\)](#)
 - [Toxicity \(51755\)](#)
 - [Turbidity \(51761\)](#)
 - [Zinc \(51829\)](#)
 - [pH \(51742\)](#)
- [Chicarita Creek](#)
 - [Benthic Community Effects \(42283\)](#)
- [Chocolate Creek](#)
 - [Benthic Community Effects \(44302\)](#)

- [Cadmium \(53449\)](#)
- [Chlorpyrifos \(53438\)](#)
- [Copper \(53450\)](#)
- [Diazinon \(53442\)](#)
- [Lead \(53451\)](#)
- [Malathion \(53443\)](#)
- [Nitrogen, Nitrite \(53453\)](#)
- [Nitrogen, ammonia \(Total Ammonia\) \(53448\)](#)
- [Zinc \(53452\)](#)
- [Chollas Creek](#)
 - [Arsenic \(53133\)](#)
 - [Benthic Community Effects \(43572\)](#)
 - [Chlordane \(50632\)](#)
 - [Chromium \(53134\)](#)
 - [Cyfluthrin \(50634\)](#)
 - [Cyhalothrin, Lambda \(50639\)](#)
 - [DDD \(Dichlorodiphenyldichloroethane\) \(50642\)](#)
 - [DDE \(Dichlorodiphenyldichloroethylene\) \(50643\)](#)
 - [DDT \(Dichlorodiphenyltrichloroethane\) \(50644\)](#)
 - [Deltamethrin \(50645\)](#)
 - [Dieldrin \(50648\)](#)
 - [Endrin \(50655\)](#)
 - [Esfenvalerate/Fenvalerate \(50656\)](#)
 - [Fenpropathrin \(50660\)](#)
 - [Fipronil \(50670\)](#)
 - [Fipronil Sulfide \(50672\)](#)
 - [Fipronil Sulfone \(50673\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(50674\)](#)
 - [Nickel \(53025\)](#)
 - [Permethrin, total \(50685\)](#)
 - [Selenium \(53037\)](#)
 - [Temperature, water \(53135\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(50661\)](#)
- [Cottonwood Creek \(San Marcos Creek watershed\)](#)
 - [Bifenthrin \(48291\)](#)
 - [Chlordane \(48292\)](#)
 - [Chlorpyrifos \(48335\)](#)
 - [Cyfluthrin \(48294\)](#)
 - [Cyhalothrin, Lambda \(48295\)](#)
 - [Cypermethrin \(48293\)](#)
 - [DDD \(Dichlorodiphenyldichloroethane\) \(48296\)](#)
 - [DDE \(Dichlorodiphenyldichloroethylene\) \(48297\)](#)
 - [Deltamethrin \(48298\)](#)
 - [Diazinon \(48299\)](#)
 - [Dieldrin \(48300\)](#)
 - [Endrin \(48301\)](#)
 - [Esfenvalerate/Fenvalerate \(48302\)](#)
 - [Fenpropathrin \(48303\)](#)
 - [Fipronil \(48332\)](#)
 - [Fipronil Sulfide \(48337\)](#)
 - [Fipronil Sulfone \(48338\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(48304\)](#)
 - [Permethrin, total \(48341\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(48342\)](#)
- [Cottonwood Creek \(Tijuana River watershed\)](#)
 - [Alkalinity as CaCO3 \(47221\)](#)

- [Aluminum \(47223\)](#)
 - [Arsenic \(47224\)](#)
 - [Benthic Community Effects \(43573\)](#)
 - [Bifenthrin \(47225\)](#)
 - [Cadmium \(47229\)](#)
 - [Chloride \(47226\)](#)
 - [Chlorpyrifos \(47230\)](#)
 - [Chromium \(47255\)](#)
 - [Copper \(47256\)](#)
 - [Cyfluthrin \(47257\)](#)
 - [Cyhalothrin, Lambda \(47258\)](#)
 - [Cypermethrin \(47259\)](#)
 - [Deltamethrin \(47260\)](#)
 - [Diazinon \(47261\)](#)
 - [Esfenvalerate/Fenvalerate \(47262\)](#)
 - [Fenpropathrin \(47263\)](#)
 - [Iron \(47265\)](#)
 - [Lead \(47290\)](#)
 - [Malathion \(47291\)](#)
 - [Manganese \(47292\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(49006\)](#)
 - [Nitrogen, Nitrite \(49008\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(47294\)](#)
 - [Oxygen, Dissolved \(47295\)](#)
 - [Permethrin, total \(47296\)](#)
 - [Silver \(47298\)](#)
 - [Specific Conductivity \(47299\)](#)
 - [Sulfates \(47300\)](#)
 - [Temperature, water \(47301\)](#)
 - [Total Dissolved Solids \(47302\)](#)
 - [Toxicity \(47304\)](#)
 - [Zinc \(47309\)](#)
 - [pH \(47297\)](#)
- [Couser Canyon Creek](#)
 - [Cadmium \(48351\)](#)
 - [Chlorpyrifos \(48359\)](#)
 - [Copper \(48360\)](#)
 - [Diazinon \(48361\)](#)
 - [Lead \(48352\)](#)
 - [Malathion \(48362\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(48364\)](#)
 - [Nitrogen, Nitrite \(48365\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(48366\)](#)
 - [Zinc \(48353\)](#)
- [Cristianitos Creek](#)
 - [Arsenic \(48367\)](#)
 - [Chromium \(48368\)](#)
 - [Copper \(48369\)](#)
 - [Lead \(48372\)](#)
 - [Mercury \(48370\)](#)
 - [Nickel \(48374\)](#)
 - [Nitrate \(48377\)](#)
 - [Oxygen, Dissolved \(48378\)](#)
 - [Temperature, water \(48381\)](#)
 - [Zinc \(48371\)](#)
 - [pH \(48373\)](#)

Dana Point Harbor

- [Ammonia \(Unionized\) \(48389\)](#)
- [Arsenic \(48400\)](#)
- [Cadmium \(48401\)](#)
- [Chlorpyrifos \(48402\)](#)
- [Diazinon \(48404\)](#)
- [Lead \(48407\)](#)
- [Malathion \(48408\)](#)
- [Nickel \(48405\)](#)
- [Selenium \(48406\)](#)
- [Silver \(48409\)](#)
- [pH \(48411\)](#)

• [De Luz Creek](#)

- [Benthic Community Effects \(44303\)](#)
- [Cadmium \(47876\)](#)
- [Chlorpyrifos \(47877\)](#)
- [Copper \(33638\)](#)
- [Diazinon \(47902\)](#)
- [Indicator Bacteria \(49194\)](#)
- [Lead \(47903\)](#)
- [Malathion \(47904\)](#)
- [Nitrogen, Nitrite \(52988\)](#)
- [Nitrogen, ammonia \(Total Ammonia\) \(52989\)](#)
- [Zinc \(33640\)](#)
- [pH \(33699\)](#)

• [De Luz Creek, unnamed tributary at De Luz Murrieta Road](#)

- [Benthic Community Effects \(50721\)](#)

• [Doane Creek](#)

- [Benthic Community Effects \(44371\)](#)
- [Temperature, water \(49038\)](#)

• [Dulzura Creek](#)

- [Benthic Community Effects \(49039\)](#)

• [East Channel Creek](#)

- [Cadmium \(48412\)](#)
- [Chlorpyrifos \(48421\)](#)
- [Copper \(48413\)](#)
- [Diazinon \(48422\)](#)
- [Lead \(48416\)](#)
- [Malathion \(48423\)](#)
- [Zinc \(48426\)](#)

• [Encinitas Creek](#)

- [Ammonia \(Unionized\) \(48427\)](#)
- [Oxygen, Dissolved \(48430\)](#)
- [Temperature, water \(48428\)](#)
- [pH \(48429\)](#)

• [English Canyon](#)

- [Ammonia \(Unionized\) \(48432\)](#)
- [Arsenic \(48433\)](#)
- [Cadmium \(48435\)](#)
- [Chlorpyrifos \(48436\)](#)
- [Chromium \(48440\)](#)

- [Copper \(48441\)](#)
- [Diazinon \(33033\)](#)
- [Lead \(48442\)](#)
- [Malathion \(48437\)](#)
- [Nickel \(48443\)](#)
- [Oxygen, Dissolved \(48446\)](#)
- [Silver \(48444\)](#)
- [Zinc \(48445\)](#)
- [pH \(48447\)](#)

- [Escondido Creek](#)
 - [Alkalinity as CaCO₃ \(47719\)](#)
 - [Aluminum \(47721\)](#)
 - [Antimony \(43690\)](#)
 - [Arsenic \(33881\)](#)
 - [Cadmium \(33942\)](#)
 - [Chlordane \(47726\)](#)
 - [Chloride \(47727\)](#)
 - [Chlorpyrifos \(47729\)](#)
 - [Chromium \(total\) \(42884\)](#)
 - [Copper \(33960\)](#)
 - [Cyfluthrin \(47730\)](#)
 - [Cyhalothrin, Lambda \(47731\)](#)
 - [Cypermethrin \(47732\)](#)
 - [Deltamethrin \(47733\)](#)
 - [Diazinon \(47734\)](#)
 - [Dieldrin \(47735\)](#)
 - [Endrin \(47736\)](#)
 - [Esfenvalerate/Fenvalerate \(47737\)](#)
 - [Fenpropathrin \(47738\)](#)
 - [Iron \(47739\)](#)
 - [Lead \(47740\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(47741\)](#)
 - [Methyl Parathion \(47743\)](#)
 - [Nickel \(33968\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(48464\)](#)
 - [Nitrogen, Nitrite \(48475\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(48476\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(47744\)](#)
 - [Permethrin, total \(47745\)](#)
 - [Silver \(33634\)](#)
 - [Specific Conductivity \(47746\)](#)
 - [Surfactants \(MBAS\) \(47747\)](#)
 - [Temperature, water \(47748\)](#)
 - [Turbidity \(33880\)](#)
 - [Zinc \(32838\)](#)
 - [pH \(34042\)](#)

- [Eucalyptus Hills Creek](#)
 - [Cadmium \(47383\)](#)
 - [Chlorpyrifos \(47384\)](#)
 - [Copper \(47385\)](#)
 - [Lead \(47389\)](#)
 - [Malathion \(47390\)](#)
 - [Zinc \(47392\)](#)

- [Felicita Creek](#)
 - [Cadmium \(33312\)](#)
 - [Chlorpyrifos \(47393\)](#)

- [Copper \(43082\)](#)
 - [Diazinon \(47394\)](#)
 - [Malathion \(47396\)](#)
 - [Zinc \(32552\)](#)
- [Forester Creek](#)
 - [Arsenic \(48358\)](#)
 - [Bifenthrin \(48383\)](#)
 - [Cadmium \(48384\)](#)
 - [Chlordane \(sediment\) \(48385\)](#)
 - [Chlorpyrifos \(48386\)](#)
 - [Chromium \(48387\)](#)
 - [Copper \(48388\)](#)
 - [Cyfluthrin \(48390\)](#)
 - [Cyhalothrin, Lambda \(48391\)](#)
 - [Cypermethrin \(48392\)](#)
 - [DDD \(Dichlorodiphenyldichloroethane\) \(48393\)](#)
 - [DDE \(Dichlorodiphenyldichloroethylene\) \(48394\)](#)
 - [DDT \(Dichlorodiphenyltrichloroethane\) \(48395\)](#)
 - [Deltamethrin \(48396\)](#)
 - [Diazinon \(48398\)](#)
 - [Dieldrin \(sediment\) \(48399\)](#)
 - [Endrin \(48403\)](#)
 - [Esfenvalerate/Fenvalerate \(48760\)](#)
 - [Fenpropathrin \(48761\)](#)
 - [Lead \(48324\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(48762\)](#)
 - [Malathion \(48321\)](#)
 - [Mercury \(48763\)](#)
 - [Methyl Parathion \(48772\)](#)
 - [Nickel \(48773\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(49101\)](#)
 - [Nitrogen, Nitrite \(49104\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(52037\)](#)
 - [Permethrin, total \(52038\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(49106\)](#)
 - [Toxicity \(49108\)](#)
 - [Zinc \(49107\)](#)
- [Fry Creek](#)
 - [Benthic Community Effects \(44229\)](#)
- [Gird Creek](#)
 - [Benthic Community Effects \(42651\)](#)
- [Gomez Creek](#)
 - [Temperature, water \(47400\)](#)
- [Gopher Creek](#)
 - [Chlorpyrifos \(47402\)](#)
 - [Copper \(47404\)](#)
 - [Diazinon \(47405\)](#)
 - [Malathion \(47409\)](#)
 - [Zinc \(47411\)](#)
- [Green Canyon Creek](#)
 - [Cadmium \(47412\)](#)
 - [Chlorpyrifos \(47413\)](#)

- [Copper \(47414\)](#)
- [Diazinon \(47415\)](#)
- [Lead \(47418\)](#)
- [Malathion \(47419\)](#)
- [Zinc \(47423\)](#)
- [Green Valley Creek](#)
 - [Antimony \(33251\)](#)
 - [Arsenic \(32614\)](#)
 - [Cadmium \(33391\)](#)
 - [Chromium \(33339\)](#)
 - [Copper \(46269\)](#)
 - [Cypermethrin \(47585\)](#)
 - [Deltamethrin \(47586\)](#)
 - [Diazinon \(47587\)](#)
 - [Esfenvalerate/Fenvalerate \(47648\)](#)
 - [Lead \(47649\)](#)
 - [Malathion \(47650\)](#)
 - [Nickel \(33069\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(48586\)](#)
 - [Nitrogen, Nitrite \(48587\)](#)
 - [Selenium \(33402\)](#)
 - [Surfactants \(MBAS\) \(47651\)](#)
- [Harbison Canyon](#)
 - [Benthic Community Effects \(47750\)](#)
 - [Cadmium \(47751\)](#)
 - [Chlorpyrifos \(47752\)](#)
 - [Copper \(47753\)](#)
 - [Diazinon \(47754\)](#)
 - [Lead \(47757\)](#)
 - [Malathion \(47758\)](#)
 - [Nitrogen, Nitrite \(48145\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(48146\)](#)
 - [Zinc \(47760\)](#)
- [Hatfield Creek](#)
 - [Cadmium \(47761\)](#)
 - [Chlorpyrifos \(47762\)](#)
 - [Copper \(47763\)](#)
 - [Diazinon \(47764\)](#)
 - [Indicator Bacteria \(47765\)](#)
 - [Lead \(47767\)](#)
 - [Malathion \(47768\)](#)
 - [Zinc \(47770\)](#)
- [Helix Street Drain](#)
 - [Cadmium \(47832\)](#)
 - [Chlorpyrifos \(47833\)](#)
 - [Copper \(47834\)](#)
 - [Diazinon \(47835\)](#)
 - [Lead \(47836\)](#)
 - [Malathion \(47837\)](#)
 - [Zinc \(47838\)](#)
- [Hodges, Lake](#)
 - [Aluminum \(33417\)](#)
 - [Ammonia as Nitrogen \(44169\)](#)
 - [Chromium \(46365\)](#)

- [Hot Spring Canyon Creek \(Orange County\)](#)
 - [Alkalinity as CaCO₃ \(47840\)](#)
 - [Aluminum \(47841\)](#)
 - [Arsenic \(47842\)](#)
 - [Benthic Community Effects \(47843\)](#)
 - [Bifenthrin \(47844\)](#)
 - [Cadmium \(47845\)](#)
 - [Chloride \(47846\)](#)
 - [Chromium \(47847\)](#)
 - [Copper \(47848\)](#)
 - [Cyfluthrin \(47849\)](#)
 - [Cyhalothrin, Lambda \(47850\)](#)
 - [Cypermethrin \(47851\)](#)
 - [Deltamethrin \(47852\)](#)
 - [Esfenvalerate/Fenvalerate \(47853\)](#)
 - [Fenpropathrin \(47854\)](#)
 - [Iron \(47855\)](#)
 - [Lead \(47856\)](#)
 - [Manganese \(47857\)](#)
 - [Nickel \(47858\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(47911\)](#)
 - [Oxygen, Dissolved \(47859\)](#)
 - [Permethrin, total \(47860\)](#)
 - [Selenium \(47861\)](#)
 - [Silver \(47862\)](#)
 - [Sulfates \(47863\)](#)
 - [Temperature, water \(47864\)](#)
 - [Total Dissolved Solids \(47865\)](#)
 - [Toxicity \(48920\)](#)
 - [Turbidity \(47866\)](#)
 - [Zinc \(47867\)](#)
 - [pH \(47868\)](#)
- [Indian Creek \(San Diego County\)](#)
 - [Benthic Community Effects \(47914\)](#)
- [Iron Springs Creek](#)
 - [Benthic Community Effects \(44230\)](#)
- [Ironside Creek](#)
 - [Benthic Community Effects \(47915\)](#)
- [Jamacha Creek](#)
 - [Cadmium \(47916\)](#)
 - [Chlorpyrifos \(47917\)](#)
 - [Copper \(47918\)](#)
 - [Diazinon \(47919\)](#)
 - [Lead \(47922\)](#)
 - [Malathion \(47923\)](#)
 - [Zinc \(47925\)](#)
- [Jamul Creek](#)
 - [Aluminum \(47968\)](#)
 - [Arsenic \(47971\)](#)
 - [Azinphos-methyl \(Guthion\) \(48003\)](#)
 - [Barium \(48008\)](#)
 - [Beryllium \(48010\)](#)

- [Cadmium \(48015\)](#)
- [Chlorpyrifos \(48017\)](#)
- [Chromium \(48018\)](#)
- [Copper \(48019\)](#)
- [Diazinon \(48020\)](#)
- [Dimethoate \(48021\)](#)
- [Disulfoton \(48022\)](#)
- [Ethoprop \(48024\)](#)
- [Indicator Bacteria \(48023\)](#)
- [Iron \(48026\)](#)
- [Lead \(48027\)](#)
- [Malathion \(48028\)](#)
- [Manganese \(48029\)](#)
- [Methidathion \(48070\)](#)
- [Methyl Parathion \(48075\)](#)
- [Nickel \(48085\)](#)
- [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(48089\)](#)
- [Nitrogen, Nitrite \(48125\)](#)
- [Nitrogen, ammonia \(Total Ammonia\) \(48127\)](#)
- [Parathion \(48092\)](#)
- [Phorate \(48096\)](#)
- [Phosmet \(48097\)](#)
- [Selenium \(48100\)](#)
- [Silver \(48123\)](#)
- [Zinc \(48108\)](#)

- [Keys Creek](#)
 - [Arsenic \(48139\)](#)
 - [Benthic Community Effects \(44312\)](#)
 - [Bifenthrin \(48141\)](#)
 - [Cadmium \(48142\)](#)
 - [Chlorpyrifos \(48611\)](#)
 - [Copper \(48607\)](#)
 - [Cypermethrin \(48617\)](#)
 - [Diazinon \(48627\)](#)
 - [Lead \(48638\)](#)
 - [Malathion \(48641\)](#)
 - [Toxicity \(48644\)](#)
 - [Zinc \(48643\)](#)

- [King Creek](#)
 - [Alkalinity as CaCO₃ \(51830\)](#)
 - [Aluminum \(51831\)](#)
 - [Arsenic \(51832\)](#)
 - [Benthic Community Effects \(53336\)](#)
 - [Bifenthrin \(51837\)](#)
 - [Cadmium \(51840\)](#)
 - [Chloride \(51848\)](#)
 - [Chromium \(51850\)](#)
 - [Copper \(51862\)](#)
 - [Cyfluthrin \(51864\)](#)
 - [Cyhalothrin, Lambda \(51868\)](#)
 - [Cypermethrin \(51871\)](#)
 - [Deltamethrin \(51875\)](#)
 - [Esfenvalerate/Fenvalerate \(51876\)](#)
 - [Fenpropathrin \(51877\)](#)
 - [Iron \(51878\)](#)
 - [Lead \(51879\)](#)
 - [Manganese \(51881\)](#)
 - [Nickel \(51885\)](#)

- [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(51905\)](#)
- [Nitrogen, Nitrite \(51920\)](#)
- [Nitrogen, ammonia \(Total Ammonia\) \(51919\)](#)
- [Oxygen, Dissolved \(51921\)](#)
- [Permethrin, total \(51922\)](#)
- [Selenium \(51924\)](#)
- [Silver \(51925\)](#)
- [Specific Conductivity \(51926\)](#)
- [Sulfates \(51927\)](#)
- [Temperature, water \(51928\)](#)
- [Total Dissolved Solids \(51929\)](#)
- [Toxicity \(51930\)](#)
- [Turbidity \(51951\)](#)
- [Zinc \(51954\)](#)
- [pH \(51923\)](#)

- [Kit Carson Creek](#)
 - [Benthic Community Effects \(43934\)](#)

- [Kitchen Creek](#)
 - [Benthic Community Effects \(43839\)](#)
 - [Oxygen, Dissolved \(32527\)](#)
 - [pH \(43323\)](#)

- [La Zanja Canyon](#)
 - [Cadmium \(48151\)](#)
 - [Chlorpyrifos \(48152\)](#)
 - [Copper \(48157\)](#)
 - [Diazinon \(48159\)](#)
 - [Lead \(48172\)](#)
 - [Malathion \(48173\)](#)
 - [Zinc \(48175\)](#)

- [Laguna Canyon Channel](#)
 - [Alkalinity as CaCO₃ \(48176\)](#)
 - [Aluminum \(48177\)](#)
 - [Arsenic \(48179\)](#)
 - [Bifenthrin \(48182\)](#)
 - [Cadmium \(48185\)](#)
 - [Chloride \(48646\)](#)
 - [Chromium \(48649\)](#)
 - [Copper \(48654\)](#)
 - [Cyfluthrin \(48714\)](#)
 - [Cyhalothrin, Lambda \(48716\)](#)
 - [Cypermethrin \(48717\)](#)
 - [Deltamethrin \(48719\)](#)
 - [Esfenvalerate/Fenvalerate \(48720\)](#)
 - [Fenpropathrin \(48742\)](#)
 - [Iron \(48743\)](#)
 - [Lead \(48744\)](#)
 - [Manganese \(48745\)](#)
 - [Mercury \(62900\)](#)
 - [Nickel \(48746\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(48747\)](#)
 - [Oxygen, Dissolved \(48748\)](#)
 - [Permethrin, total \(48751\)](#)
 - [Selenium \(48749\)](#)
 - [Silver \(48750\)](#)
 - [Sulfates \(48752\)](#)

- [Total Dissolved Solids \(48753\)](#)
 - [Turbidity \(48755\)](#)
 - [Zinc \(48756\)](#)
 - [pH \(48758\)](#)
- [Lawson Creek](#)
 - [Benthic Community Effects \(42812\)](#)
 - [Metals \(42770\)](#)
- [Live Oak Creek \(San Diego County\)](#)
 - [Benthic-Macroinvertebrate Bioassessments \(48186\)](#)
 - [Cadmium \(48187\)](#)
 - [Chlorpyrifos \(48188\)](#)
 - [Copper \(48190\)](#)
 - [Diazinon \(48191\)](#)
 - [Lead \(48194\)](#)
 - [Malathion \(48196\)](#)
 - [Zinc \(48199\)](#)
- [Loma Alta Creek](#)
 - [Arsenic \(49263\)](#)
 - [Cadmium \(49266\)](#)
 - [Chlorpyrifos \(49397\)](#)
 - [Chromium \(49399\)](#)
 - [Copper \(49400\)](#)
 - [Cypermethrin \(49401\)](#)
 - [Deltamethrin \(49402\)](#)
 - [Diazinon \(49405\)](#)
 - [Esfenvalerate/Fenvalerate \(49406\)](#)
 - [Lead \(49407\)](#)
 - [Malathion \(49408\)](#)
 - [Nickel \(49409\)](#)
 - [Zinc \(49410\)](#)
- [Long Canyon \(Cottonwood wshed\) \(from 0.2 mile upstream to 0.4 miles downstream of Troy Canyon\)](#)
 - [Benthic Community Effects \(43336\)](#)
 - [Oxygen, Dissolved \(44018\)](#)
 - [pH \(43886\)](#)
- [Long Canyon Creek \(Lower Sweetwater Watershed\)](#)
 - [Benthic Community Effects \(48200\)](#)
 - [Cadmium \(48201\)](#)
 - [Chlorpyrifos \(48205\)](#)
 - [Copper \(48208\)](#)
 - [Diazinon \(48212\)](#)
 - [Lead \(48221\)](#)
 - [Malathion \(48223\)](#)
 - [Zinc \(48225\)](#)
- [Los Coches Creek](#)
 - [Cadmium \(47444\)](#)
 - [Chlorpyrifos \(47445\)](#)
 - [Copper \(47455\)](#)
 - [Lead \(47464\)](#)
 - [Malathion \(47468\)](#)
 - [Zinc \(47465\)](#)
- [Los Penasquitos Creek](#)

- [Arsenic \(47474\)](#)
- [Cadmium \(47498\)](#)
- [Chlordane \(47502\)](#)
- [Chromium \(47503\)](#)
- [Copper \(47499\)](#)
- [Cyfluthrin \(47539\)](#)
- [Cyhalothrin, Lambda \(47540\)](#)
- [Cypermethrin \(47541\)](#)
- [DDD \(Dichlorodiphenyldichloroethane\) \(47542\)](#)
- [DDE \(Dichlorodiphenyldichloroethylene\) \(47549\)](#)
- [DDT \(Dichlorodiphenyltrichloroethane\) \(47550\)](#)
- [Deltamethrin \(47553\)](#)
- [Diazinon \(47555\)](#)
- [Dieldrin \(47556\)](#)
- [Endrin \(47557\)](#)
- [Esfenvalerate/Fenvalerate \(47589\)](#)
- [Fenpropathrin \(47602\)](#)
- [Fipronil \(47603\)](#)
- [Fipronil Sulfide \(47604\)](#)
- [Fipronil Sulfone \(47607\)](#)
- [Lead \(47500\)](#)
- [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(47608\)](#)
- [Malathion \(47609\)](#)
- [Nickel \(47504\)](#)
- [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(47551\)](#)
- [Zinc \(47501\)](#)

- [Los Penasquitos Lagoon](#)
 - [2-Methylnaphthalene \(52865\)](#)
 - [Antimony \(52866\)](#)
 - [Arsenic \(52867\)](#)
 - [Benzo\(a\)anthracene \(52868\)](#)
 - [Cadmium \(sediment\) \(52869\)](#)
 - [Chlordane \(52870\)](#)
 - [Chromium \(52871\)](#)
 - [Chrysene \(C1-C4\) \(52872\)](#)
 - [Copper \(52873\)](#)
 - [Dibenz\[a,h\]anthracene \(52874\)](#)
 - [Endrin \(52875\)](#)
 - [Indicator Bacteria \(53454\)](#)
 - [Lead \(52876\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(52877\)](#)
 - [Mercury \(52878\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) | Toxicity \(52879\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(52880\)](#)
 - [Phenanthrene \(52881\)](#)
 - [Pyrene \(52882\)](#)
 - [Silver \(52883\)](#)
 - [Zinc \(52884\)](#)

- [Loveland Reservoir](#)
 - [Antimony \(33046\)](#)
 - [Arsenic \(33205\)](#)
 - [Barium \(33047\)](#)
 - [Beryllium \(33357\)](#)
 - [Cadmium \(44020\)](#)
 - [Chromium \(33295\)](#)
 - [Copper \(32730\)](#)
 - [Cyanide \(47881\)](#)
 - [Indicator Bacteria \(47887\)](#)

- [Iron \(33381\)](#)
- [Lead \(47891\)](#)
- [Mercury \(44409\)](#)
- [Nickel \(33383\)](#)
- [Nitrogen, Nitrate \(47892\)](#)
- [Selenium \(33378\)](#)
- [Silver \(32665\)](#)
- [Thallium \(32666\)](#)
- [Zinc \(32709\)](#)

- [McGonigle Canyon](#)
 - [Arsenic \(47896\)](#)
 - [Benthic Community Effects \(47901\)](#)
 - [Bifenthrin \(47900\)](#)
 - [Cadmium \(47905\)](#)
 - [Chromium \(47906\)](#)
 - [Copper \(47907\)](#)
 - [Cypermethrin \(47912\)](#)
 - [Lead \(47908\)](#)
 - [Nickel \(47909\)](#)
 - [Toxicity \(47913\)](#)
 - [Zinc \(47910\)](#)

- [Mexican Canyon Creek \(eastern tributary to Sweetwater River, Upper\)](#)
 - [Ammonia \(47985\)](#)
 - [Cadmium \(47932\)](#)
 - [Chlorpyrifos \(47962\)](#)
 - [Copper \(47964\)](#)
 - [Diazinon \(47969\)](#)
 - [Lead \(47965\)](#)
 - [Malathion \(47982\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(47983\)](#)
 - [Nitrogen, Nitrite \(47989\)](#)
 - [Zinc \(47966\)](#)

- [Mexican Canyon Creek \(western tributary to Sweetwater River, Upper\)](#)
 - [Ammonia \(48005\)](#)
 - [Cadmium \(47992\)](#)
 - [Chlorpyrifos \(48007\)](#)
 - [Copper \(47994\)](#)
 - [Diazinon \(47999\)](#)
 - [Lead \(47995\)](#)
 - [Malathion \(48009\)](#)
 - [Nitrogen, Nitrite \(48006\)](#)
 - [Zinc \(47998\)](#)

- [Mission Bay](#)
 - [Arsenic \(49435\)](#)
 - [Cadmium \(49438\)](#)
 - [Chlordane \(49439\)](#)
 - [Chlorpyrifos \(49440\)](#)
 - [Dieldrin \(49441\)](#)
 - [Endosulfan \(49443\)](#)
 - [Endrin \(49445\)](#)
 - [Heptachlor epoxide \(49446\)](#)
 - [Hexachlorobenzene/ HCB \(49448\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(49450\)](#)
 - [Mirex \(49453\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(49457\)](#)

- [Selenium \(49463\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(49464\)](#)
 - [Toxicity \(49467\)](#)
- [Mission Bay Shoreline, La Cima Drive at Crown Point Shores](#)
 - [Indicator Bacteria \(49434\)](#)
- [Mission Bay Shoreline, at Fiesta Island northwest shore](#)
 - [Indicator Bacteria \(49429\)](#)
- [Mission Bay Shoreline, at Santa Clara Point](#)
 - [Indicator Bacteria \(49431\)](#)
- [Mission Bay Shoreline, at Ventura Cove](#)
 - [Indicator Bacteria \(49433\)](#)
- [Moosa Canyon Creek](#)
 - [Arsenic \(48038\)](#)
 - [Benthic Community Effects \(48116\)](#)
 - [Bifenthrin \(48041\)](#)
 - [Cadmium \(48043\)](#)
 - [Chlorpyrifos \(48111\)](#)
 - [Chromium \(48051\)](#)
 - [Copper \(48046\)](#)
 - [Cypermethrin \(48112\)](#)
 - [Diazinon \(48114\)](#)
 - [Lead \(48047\)](#)
 - [Malathion \(48115\)](#)
 - [Nickel \(48048\)](#)
 - [Toxicity \(42906\)](#)
 - [Zinc \(48049\)](#)
- [Moosa Canyon, South Fork](#)
 - [Cadmium \(48124\)](#)
 - [Chlorpyrifos \(48119\)](#)
 - [Copper \(48126\)](#)
 - [Diazinon \(48120\)](#)
 - [Lead \(48128\)](#)
 - [Malathion \(48122\)](#)
 - [Zinc \(48131\)](#)
- [Moro Canyon Creek](#)
 - [Indicator Bacteria \(48261\)](#)
 - [Oxygen, Dissolved \(48262\)](#)
 - [pH \(48263\)](#)
- [Murphy Canyon](#)
 - [Arsenic \(48274\)](#)
 - [Benthic Community Effects \(51714\)](#)
 - [Bifenthrin \(48275\)](#)
 - [Cadmium \(48276\)](#)
 - [Chromium \(48277\)](#)
 - [Copper \(48278\)](#)
 - [Cypermethrin \(48279\)](#)
 - [Lead \(48281\)](#)
 - [Nickel \(48283\)](#)
 - [Toxicity \(48288\)](#)

Zinc (48286)

- Murrieta Creek
 - Aluminum (33429)
 - Chromium (33306)
 - Oxygen, Dissolved (48180)
 - pH (34135)
- Oak Creek (San Diego County)
 - Cadmium (48280)
 - Copper (48282)
 - Indicator Bacteria (48287)
 - Lead (48284)
 - Zinc (48285)
- Olive Vista Creek
 - Cadmium (48305)
 - Chlorpyrifos (48311)
 - Copper (48306)
 - Diazinon (48308)
 - Indicator Bacteria (48313)
 - Lead (48307)
 - Malathion (48309)
 - Nitrate/Nitrite (Nitrite + Nitrate as N) (48314)
 - Nitrogen, Nitrite (48315)
 - Zinc (48310)
- Otay River
 - Benthic Community Effects (48478)
 - Temperature, water (48477)
- Pacific Ocean Shoreline at Cardiff Reef
 - Arsenic (49495)
 - Cadmium (49500)
 - Chlordane (49501)
 - Chlorpyrifos (49502)
 - Dieldrin (49504)
 - Endosulfan (49506)
 - Endrin (49509)
 - Heptachlor epoxide (49517)
 - Hexachlorobenzene/ HCB (49519)
 - Indicator Bacteria (49494)
 - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49522)
 - Mercury (49526)
 - Mirex (49549)
 - PAHs (Polycyclic Aromatic Hydrocarbons) (49550)
 - PCBs (Polychlorinated biphenyls) (49553)
 - Selenium (49559)
 - Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) (49565)
- Pacific Ocean Shoreline at Dana Point
 - Arsenic (49582)
 - Cadmium (49610)
 - Chlordane (49615)
 - Chlorpyrifos (49617)
 - Dieldrin (49621)
 - Endosulfan (49623)
 - Endrin (49624)

- [Heptachlor epoxide \(49625\)](#)
- [Hexachlorobenzene/ HCB \(49626\)](#)
- [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(49628\)](#)
- [Mercury \(49630\)](#)
- [Mirex \(49632\)](#)
- [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(49634\)](#)
- [PCBs \(Polychlorinated biphenyls\) \(49635\)](#)
- [Selenium \(49637\)](#)
- [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(49638\)](#)
- [Pacific Ocean Shoreline at Scripps Reef](#)
 - [Arsenic \(49639\)](#)
 - [Cadmium \(49640\)](#)
 - [Chlordane \(49641\)](#)
 - [Chlorpyrifos \(49643\)](#)
 - [Dieldrin \(49644\)](#)
 - [Endosulfan \(49645\)](#)
 - [Endrin \(49646\)](#)
 - [Heptachlor epoxide \(49648\)](#)
 - [Hexachlorobenzene/ HCB \(49649\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(49650\)](#)
 - [Mercury \(49653\)](#)
 - [Mirex \(49654\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(49655\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(49657\)](#)
 - [Selenium \(49658\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(49659\)](#)
- [Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth](#)
 - [Chlorpyrifos \(49660\)](#)
 - [Diazinon \(49661\)](#)
 - [Malathion \(49662\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49663\)](#)
 - [pH \(49667\)](#)
- [Pacific Ocean Shoreline, Aliso HSA, at Treasure Island Pier](#)
 - [Indicator Bacteria \(49674\)](#)
- [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(Batiquitos Lagoon Outlet\)](#)
 - [Indicator Bacteria \(43230\)](#)
- [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(Encina Creek Outlet\)](#)
 - [Indicator Bacteria \(49678\)](#)
- [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(near Pointsettia Lane\)](#)
 - [Indicator Bacteria \(49679\)](#)
- [Pacific Ocean Shoreline, Batiquitos HSA, at South Carlsbad State Beach \(near Ponto Drive and Island Way\)](#)
 - [Indicator Bacteria \(49680\)](#)
- [Pacific Ocean Shoreline, Batiquitos HSA, at Swamis Beach](#)
 - [Indicator Bacteria \(43019\)](#)
- [Pacific Ocean Shoreline, Coronado HA, at Avenida del Sol](#)
 - [Indicator Bacteria \(44718\)](#)
- [Pacific Ocean Shoreline, Coronado HA, at Loma Ave/ Central Beach](#)

- [Indicator Bacteria \(43266\)](#)
- [Pacific Ocean Shoreline, Coronado HA, at NASNI Beach/North Beach C](#)
 - [Indicator Bacteria \(44567\)](#)
- [Pacific Ocean Shoreline, Coronado HA, at Navy Fence/Ocean Blvd](#)
 - [Indicator Bacteria \(43583\)](#)
- [Pacific Ocean Shoreline, Coronado HA, at Silver Strand \(north end, Oceanside\)](#)
 - [Indicator Bacteria \(43950\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Camel Point](#)
 - [Indicator Bacteria \(42707\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock](#)
 - [Indicator Bacteria \(49696\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at harbor entrance](#)
 - [Indicator Bacteria \(49698\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Laguna Lido](#)
 - [Indicator Bacteria \(43267\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge](#)
 - [Arsenic \(49703\)](#)
 - [Cadmium \(49708\)](#)
 - [Chlorpyrifos \(49713\)](#)
 - [Copper \(49715\)](#)
 - [Diazinon \(49717\)](#)
 - [Lead \(49719\)](#)
 - [Malathion \(49720\)](#)
 - [Nickel \(49725\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49727\)](#)
 - [Selenium \(49728\)](#)
 - [Silver \(49730\)](#)
 - [Zinc \(49734\)](#)
- [Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach](#)
 - [Arsenic \(49736\)](#)
 - [Cadmium \(49738\)](#)
 - [Chlorpyrifos \(49740\)](#)
 - [Copper \(49742\)](#)
 - [Diazinon \(49750\)](#)
 - [Lead \(49745\)](#)
 - [Malathion \(49749\)](#)
 - [Nickel \(49753\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49755\)](#)
 - [Selenium \(49756\)](#)
 - [Silver \(49757\)](#)
 - [Zinc \(49760\)](#)
- [Pacific Ocean Shoreline, El Salto HSA, Oceanside at Cassidy Street](#)
 - [Indicator Bacteria \(44709\)](#)
- [Pacific Ocean Shoreline, El Salto HSA, Oceanside at St Malo Beach](#)
 - [Indicator Bacteria \(36340\)](#)

- [Pacific Ocean Shoreline, Laguna Beach HSA, at Laguna Hotel](#)
 - [Arsenic \(49812\)](#)
 - [Copper \(49813\)](#)
 - [Lead \(49814\)](#)
 - [Nickel \(49815\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49817\)](#)
 - [Selenium \(49819\)](#)
 - [Silver \(49820\)](#)
 - [Zinc \(49821\)](#)
- [Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach](#)
 - [Toxicity \(49823\)](#)
- [Pacific Ocean Shoreline, Laguna Beach HSA, at Pearl Street](#)
 - [Indicator Bacteria \(49824\)](#)
- [Pacific Ocean Shoreline, Loma Alta HSA, Oceanside at Forester Street](#)
 - [Indicator Bacteria \(44564\)](#)
- [Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave](#)
 - [Indicator Bacteria \(49831\)](#)
- [Pacific Ocean Shoreline, Los Monos HSA, at Carlsbad State Beach at Warm Water Jetty](#)
 - [Indicator Bacteria \(49828\)](#)
- [Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach \(near Cerezo Drive\)](#)
 - [Indicator Bacteria \(42724\)](#)
- [Pacific Ocean Shoreline, Los Monos HSA, at South Carlsbad State Beach \(near Palomar Airport Road\)](#)
 - [Indicator Bacteria \(49830\)](#)
- [Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek](#)
 - [Chlorpyrifos \(49840\)](#)
 - [Diazinon \(49841\)](#)
 - [Malathion \(49842\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49843\)](#)
 - [Toxicity \(49844\)](#)
- [Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek](#)
 - [Cadmium \(49846\)](#)
 - [Chlorpyrifos \(49847\)](#)
 - [Copper \(49848\)](#)
 - [Diazinon \(49849\)](#)
 - [Lead \(49850\)](#)
 - [Malathion \(49851\)](#)
 - [Nickel \(49852\)](#)
 - [Selenium \(49854\)](#)
 - [Silver \(49855\)](#)
 - [Zinc \(49857\)](#)
- [Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground](#)
 - [Arsenic \(49858\)](#)
 - [Cadmium \(49859\)](#)
 - [Copper \(49861\)](#)
 - [Diazinon \(49862\)](#)
 - [Lead \(49863\)](#)

- [Malathion \(49864\)](#)
 - [Nickel \(49865\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49866\)](#)
 - [Selenium \(49872\)](#)
 - [Silver \(49873\)](#)
 - [Toxicity \(49874\)](#)
 - [Zinc \(49876\)](#)
- [Pacific Ocean Shoreline, Lower Ysidora HSA, at Camp Pendleton](#)
 - [Indicator Bacteria \(44483\)](#)
- [Pacific Ocean Shoreline, Lower Ysidora HSA, north of Santa Margarita River](#)
 - [Indicator Bacteria \(49879\)](#)
- [Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Ave](#)
 - [Indicator Bacteria \(42310\)](#)
- [Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset](#)
 - [Indicator Bacteria \(42291\)](#)
- [Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty](#)
 - [Arsenic \(49884\)](#)
 - [Cadmium \(49885\)](#)
 - [Chlordane \(49886\)](#)
 - [Chlorpyrifos \(49888\)](#)
 - [Dieldrin \(49889\)](#)
 - [Endosulfan \(49891\)](#)
 - [Endrin \(49892\)](#)
 - [Heptachlor epoxide \(49898\)](#)
 - [Hexachlorobenzene/ HCB \(49899\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(49900\)](#)
 - [Mercury \(49901\)](#)
 - [Mirex \(49902\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(49903\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(49905\)](#)
 - [Selenium \(49906\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(49907\)](#)
- [Pacific Ocean Shoreline, Otay Valley HA, north of Palm Avenue Jetty](#)
 - [Indicator Bacteria \(49908\)](#)
- [Pacific Ocean Shoreline, Point Loma HA, at Ladera Street](#)
 - [Indicator Bacteria \(42335\)](#)
- [Pacific Ocean Shoreline, Point Loma HA, at Lighthouse](#)
 - [Indicator Bacteria \(44225\)](#)
- [Pacific Ocean Shoreline, Point Loma HA, at Point Loma Treatment Plant](#)
 - [Indicator Bacteria \(43016\)](#)
- [Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Fletcher Cove Beach](#)
 - [Indicator Bacteria \(49915\)](#)
- [Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park](#)
 - [Indicator Bacteria \(44264\)](#)

- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Projection of Las Palmeras](#)
 - [Indicator Bacteria \(32378\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, 450 ft North of Pier](#)
 - [Indicator Bacteria \(44099\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, Trafalgar Street Beach](#)
 - [Indicator Bacteria \(44651\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at San Clemente State Beach, Projection of Avenida Calafia](#)
 - [Indicator Bacteria \(32368\)](#)
- [Pacific Ocean Shoreline, San Clemente HA, at South Poche Beach at Capistrano Shores](#)
 - [Indicator Bacteria \(44379\)](#)
- [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Chart House parking](#)
 - [Indicator Bacteria \(49938\)](#)
- [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Las Olas \(Georges\)](#)
 - [Indicator Bacteria \(49939\)](#)
- [Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at Seaside State Park](#)
 - [Indicator Bacteria \(43808\)](#)
- [Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach \(Main Entrance\)](#)
 - [Indicator Bacteria \(44346\)](#)
- [Pacific Ocean Shoreline, San Elijo HSA, at San Elijo State Beach \(Pipes area\)](#)
 - [Indicator Bacteria \(43701\)](#)
- [Pacific Ocean Shoreline, San Joaquin Hills HSA, at Aster Street](#)
 - [Cadmium \(49945\)](#)
 - [Chlorpyrifos \(49946\)](#)
 - [Copper \(49947\)](#)
 - [Diazinon \(49948\)](#)
 - [Lead \(49949\)](#)
 - [Malathion \(49950\)](#)
 - [Nickel \(49955\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49956\)](#)
 - [Oxygen, Dissolved \(49957\)](#)
 - [Selenium \(49965\)](#)
 - [Silver \(49971\)](#)
 - [Toxicity \(49974\)](#)
 - [Zinc \(49975\)](#)
- [Pacific Ocean Shoreline, San Joaquin Hills HSA, at Heisler Park](#)
 - [Indicator Bacteria \(49978\)](#)
- [Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way](#)
 - [Indicator Bacteria \(44345\)](#)
- [Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Surfrider Way](#)
 - [Indicator Bacteria \(44137\)](#)
- [Pacific Ocean Shoreline, San Luis Rey HU, at Pier at Tyson Way](#)

- [Indicator Bacteria \(43450\)](#)
- [Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey River mouth](#)
 - [Arsenic \(49981\)](#)
 - [Cadmium \(49982\)](#)
 - [Chlordane \(49983\)](#)
 - [Chlorpyrifos \(49984\)](#)
 - [Dieldrin \(49985\)](#)
 - [Endosulfan \(49986\)](#)
 - [Endrin \(49987\)](#)
 - [Heptachlor epoxide \(49988\)](#)
 - [Hexachlorobenzene/ HCB \(49989\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(49990\)](#)
 - [Mercury \(49991\)](#)
 - [Mirex \(49992\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(49993\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(49994\)](#)
 - [Selenium \(49995\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(49996\)](#)
- [Pacific Ocean Shoreline, San Onofre Valley HSA, at San Onofre State Beach at Churchs Beach](#)
 - [Indicator Bacteria \(50000\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach \(near Ventura Place\)](#)
 - [Indicator Bacteria \(50003\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Bonair St at Windansea Beach](#)
 - [Indicator Bacteria \(44329\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Crystal Pier](#)
 - [Indicator Bacteria \(45603\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at El Paseo Grande at La Jolla Shores Beach](#)
 - [Indicator Bacteria \(44298\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Grand Ave, Pacific Beach](#)
 - [Indicator Bacteria \(44290\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at La Jolla Cove](#)
 - [Arsenic \(50011\)](#)
 - [Cadmium \(50012\)](#)
 - [Chlordane \(50013\)](#)
 - [Chlorpyrifos \(50014\)](#)
 - [Dieldrin \(50015\)](#)
 - [Endosulfan \(50016\)](#)
 - [Endrin \(50017\)](#)
 - [Heptachlor epoxide \(50018\)](#)
 - [Hexachlorobenzene/ HCB \(50019\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(50020\)](#)
 - [Mercury \(50021\)](#)
 - [Mirex \(50022\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(50023\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(50024\)](#)
 - [Selenium \(50025\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(50026\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at La Jolla Hermosa Park](#)

- [Indicator Bacteria \(50027\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Playa del Norte at Windansea Beach](#)
 - [Indicator Bacteria \(43156\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Scripps Pier at La Jolla Shores Beach](#)
 - [Indicator Bacteria \(42743\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at South Casa Beach](#)
 - [Indicator Bacteria \(46230\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach](#)
 - [Indicator Bacteria \(44135\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Vista de la Playa, Windansea Beach](#)
 - [Indicator Bacteria \(50038\)](#)
- [Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla](#)
 - [Indicator Bacteria \(46281\)](#)
- [Pacific Ocean Shoreline, Torrey Pines State Beach, Anderson Canyon](#)
 - [Indicator Bacteria \(41392\)](#)
- [Pine Valley Creek \(Lower\)](#)
 - [Alkalinity as CaCO₃ \(53177\)](#)
 - [Aluminum \(53178\)](#)
 - [Arsenic \(53180\)](#)
 - [Azinphos-methyl \(Guthion\) \(53181\)](#)
 - [Barium \(53182\)](#)
 - [Benthic Community Effects \(51720\)](#)
 - [Beryllium \(53183\)](#)
 - [Bifenthrin \(53185\)](#)
 - [Cadmium \(53186\)](#)
 - [Chloride \(53187\)](#)
 - [Chlorpyrifos \(53188\)](#)
 - [Chromium \(53190\)](#)
 - [Copper \(53198\)](#)
 - [Cyfluthrin \(53199\)](#)
 - [Cyhalothrin, Lambda \(53200\)](#)
 - [Cypermethrin \(53202\)](#)
 - [Deltamethrin \(53205\)](#)
 - [Diazinon \(53211\)](#)
 - [Dimethoate \(53215\)](#)
 - [Disulfoton \(47237\)](#)
 - [Esfenvalerate/Fenvalerate \(53217\)](#)
 - [Ethoprop \(53224\)](#)
 - [Fenpropathrin \(53229\)](#)
 - [Iron \(53230\)](#)
 - [Lead \(53232\)](#)
 - [Malathion \(53234\)](#)
 - [Manganese \(53235\)](#)
 - [Methidathion \(53236\)](#)
 - [Methyl Parathion \(53238\)](#)
 - [Nickel \(53239\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(53240\)](#)
 - [Nitrogen, Nitrite \(53241\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(53242\)](#)

- [Oxygen, Dissolved \(53243\)](#)
 - [Parathion \(53244\)](#)
 - [Permethrin, total \(53245\)](#)
 - [Phorate \(53247\)](#)
 - [Phosmet \(53248\)](#)
 - [Selenium \(53249\)](#)
 - [Silver \(53253\)](#)
 - [Specific Conductivity \(53257\)](#)
 - [Sulfates \(53263\)](#)
 - [Temperature, water \(53264\)](#)
 - [Total Dissolved Solids \(53266\)](#)
 - [Toxicity \(53267\)](#)
 - [Turbidity \(53268\)](#)
 - [Zinc \(53270\)](#)
 - [pH \(53272\)](#)
- [Pine Valley Creek \(Upper\)](#)
 - [Alkalinity as CaCO3 \(53306\)](#)
 - [Aluminum \(53307\)](#)
 - [Arsenic \(53308\)](#)
 - [Benthic Community Effects \(43722\)](#)
 - [Bifenthrin \(53309\)](#)
 - [Cadmium \(53310\)](#)
 - [Chloride \(53311\)](#)
 - [Chromium \(53312\)](#)
 - [Copper \(53313\)](#)
 - [Cyfluthrin \(53314\)](#)
 - [Cyhalothrin, Lambda \(53315\)](#)
 - [Cypermethrin \(53316\)](#)
 - [Deltamethrin \(53317\)](#)
 - [Esfenvalerate/Fenvalerate \(53318\)](#)
 - [Fenpropathrin \(53319\)](#)
 - [Iron \(53320\)](#)
 - [Lead \(53321\)](#)
 - [Manganese \(53322\)](#)
 - [Nickel \(53323\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(53324\)](#)
 - [Nitrite as Nitrite NO2 \(33181\)](#)
 - [Nitrogen, Nitrite \(53325\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(53327\)](#)
 - [Oxygen, Dissolved \(33115\)](#)
 - [Permethrin, total \(53328\)](#)
 - [Phosphorus \(32840\)](#)
 - [Selenium \(53329\)](#)
 - [Silver \(53330\)](#)
 - [Specific Conductivity \(53331\)](#)
 - [Sulfates \(53332\)](#)
 - [Temperature, water \(53333\)](#)
 - [Total Dissolved Solids \(33167\)](#)
 - [Toxicity \(53334\)](#)
 - [Zinc \(53335\)](#)
 - [pH \(33116\)](#)
- [Prima Deshecha Creek](#)
 - [Ammonia \(48500\)](#)
 - [Arsenic \(48501\)](#)
 - [Chlorpyrifos \(48504\)](#)
 - [Chromium \(48502\)](#)
 - [Copper \(48503\)](#)
 - [Diazinon \(48505\)](#)

- [Lead \(48506\)](#)
- [Mercury \(48508\)](#)
- [Oxygen, Dissolved \(48512\)](#)
- [Selenium \(48513\)](#)
- [Silver \(48509\)](#)
- [Zinc \(48510\)](#)
- [pH \(48511\)](#)
- [Rainbow Creek](#)
 - [Antimony \(53028\)](#)
 - [Arsenic \(44268\)](#)
 - [Barium \(53032\)](#)
 - [Benthic Community Effects \(43756\)](#)
 - [Beryllium \(53033\)](#)
 - [Cadmium \(50049\)](#)
 - [Chromium \(50048\)](#)
 - [Copper \(43501\)](#)
 - [Lead \(50050\)](#)
 - [Manganese \(33855\)](#)
 - [Mercury \(33597\)](#)
 - [Nickel \(50051\)](#)
 - [Nitrate \(53034\)](#)
 - [Selenium \(53035\)](#)
 - [Silver \(53036\)](#)
 - [Turbidity \(43596\)](#)
 - [Zinc \(34101\)](#)
- [Rattlesnake Creek](#)
 - [Benthic Community Effects \(44296\)](#)
- [Redhawk Channel](#)
 - [Oxygen, Dissolved \(53338\)](#)
 - [pH \(50052\)](#)
- [Reidy Canyon Creek](#)
 - [Ammonia \(48531\)](#)
 - [Cadmium \(48515\)](#)
 - [Chlorpyrifos \(48523\)](#)
 - [Copper \(48516\)](#)
 - [Diazinon \(48522\)](#)
 - [Lead \(48517\)](#)
 - [Malathion \(48520\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(48528\)](#)
 - [Nitrogen, Nitrite \(43957\)](#)
 - [Zinc \(48518\)](#)
- [Rose Creek](#)
 - [Arsenic \(48570\)](#)
 - [Bifenthrin \(48594\)](#)
 - [Cadmium \(48573\)](#)
 - [Chromium \(48580\)](#)
 - [Copper \(48581\)](#)
 - [Cypermethrin \(48597\)](#)
 - [Lead \(48582\)](#)
 - [Nickel \(48595\)](#)
 - [Zinc \(48596\)](#)
- [Salt Creek \(Orange County\)](#)

- [Ammonia \(48619\)](#)
- [Arsenic \(48629\)](#)
- [Cadmium \(48635\)](#)
- [Chlorpyrifos \(48636\)](#)
- [Chromium \(48623\)](#)
- [Copper \(48625\)](#)
- [Diazinon \(48637\)](#)
- [Lead \(48624\)](#)
- [Nickel \(48626\)](#)
- [Selenium \(48628\)](#)
- [Silver \(48620\)](#)
- [Zinc \(48622\)](#)
- [pH \(48630\)](#)
- [San Diego Bay](#)
 - [Arsenic \(52947\)](#)
 - [Cadmium \(52948\)](#)
 - [Chlordane \(52949\)](#)
 - [Chlorpyrifos \(52950\)](#)
 - [Dieldrin \(52951\)](#)
 - [Endosulfan \(52952\)](#)
 - [Endrin \(52953\)](#)
 - [Heptachlor epoxide \(52954\)](#)
 - [Hexachlorobenzene/ HCB \(52955\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(52956\)](#)
 - [Mirex \(52957\)](#)
 - [Selenium \(52961\)](#)
 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(52962\)](#)
- [San Diego Bay Shoreline, at Bessemer Street](#)
 - [Indicator Bacteria \(48316\)](#)
- [San Diego Bay Shoreline, at Glorietta Bay](#)
 - [Indicator Bacteria \(43806\)](#)
- [San Diego Bay Shoreline, at Spanish Landing](#)
 - [Indicator Bacteria \(41588\)](#)
- [San Diego Bay Shoreline, near sub base](#)
 - [Arsenic | Cadmium | Chlordane | Chromium \(total\) | Copper | Lead | Mercury | Nickel | PAHs \(Polycyclic Aromatic Hydrocarbons\) | PCBs \(Polychlorinated biphenyls\) | Silver \(43491\)](#)
- [San Diego Bay Shoreline; Kellogg Street Beach](#)
 - [Indicator Bacteria \(44519\)](#)
- [San Diego River \(Lower\)](#)
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 - [Antimony \(49145\)](#)
 - [Arsenic \(49146\)](#)
 - [Benzo\(a\)anthracene \(49148\)](#)
 - [Bifenthrin \(49150\)](#)
 - [Chlordane \(49152\)](#)
 - [Chlorpyrifos \(49153\)](#)
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- [Lead \(49469\)](#)
- [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(49470\)](#)
- [Malathion \(49472\)](#)
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- [Pyrene \(51363\)](#)
- [Selenium \(51364\)](#)
- [Silver \(51366\)](#)
- [Surfactants \(MBAS\) \(51367\)](#)
- [Zinc \(51374\)](#)
- [pH \(49479\)](#)

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 - [Aluminum \(51465\)](#)
 - [Arsenic \(51468\)](#)
 - [Benthic Community Effects \(51733\)](#)
 - [Bifenthrin \(51494\)](#)
 - [Cadmium \(51495\)](#)
 - [Chloride \(51496\)](#)
 - [Chlorpyrifos \(51515\)](#)
 - [Chromium \(51502\)](#)
 - [Copper \(51511\)](#)
 - [Cyfluthrin \(51517\)](#)
 - [Cyhalothrin, Lambda \(51518\)](#)
 - [Cypermethrin \(51519\)](#)
 - [Deltamethrin \(51520\)](#)
 - [Diazinon \(51521\)](#)
 - [Esfenvalerate/Fenvalerate \(51522\)](#)
 - [Fenpropathrin \(51523\)](#)
 - [Iron \(51524\)](#)
 - [Lead \(51526\)](#)
 - [Malathion \(51530\)](#)
 - [Manganese \(51533\)](#)
 - [Nickel \(51536\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(51550\)](#)
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 - [Nitrogen, ammonia \(Total Ammonia\) \(51554\)](#)
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 - [Chromium \(49384\)](#)
 - [Copper \(49393\)](#)
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 - [Diazinon \(49732\)](#)
 - [Esfenvalerate/Fenvalerate \(49729\)](#)
 - [Lead \(49386\)](#)
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 - [Nickel \(49731\)](#)
 - [Selenium \(49721\)](#)
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 - [Copper \(49183\)](#)
 - [Diazinon \(49185\)](#)
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 - [Malathion \(49189\)](#)
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 - [Chlorpyrifos \(49161\)](#)
 - [Copper \(49162\)](#)
 - [Diazinon \(49163\)](#)
 - [Lead \(49164\)](#)
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 - [Chlorpyrifos \(49105\)](#)
 - [Copper \(49132\)](#)
 - [Diazinon \(49133\)](#)
 - [Lead \(49134\)](#)
 - [Malathion \(49135\)](#)
 - [Nitrogen, Nitrite \(49136\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49137\)](#)
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 - [2-Methylnaphthalene \(48449\)](#)
 - [Antimony \(53351\)](#)
 - [Arsenic \(53353\)](#)
 - [Benzo\(a\)anthracene \(53354\)](#)
 - [Cadmium \(53355\)](#)
 - [Chlordane \(53356\)](#)
 - [Chromium \(53357\)](#)

- [Chrysene \(C1-C4\) \(53358\)](#)
- [Copper \(53350\)](#)
- [Dibenz\[a,h\]anthracene \(53359\)](#)
- [Endrin \(53360\)](#)
- [Lead \(53361\)](#)
- [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(53362\)](#)
- [Mercury \(53363\)](#)
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- [PCBs \(Polychlorinated biphenyls\) \(53366\)](#)
- [Phenanthrene \(53367\)](#)
- [Pyrene \(53368\)](#)
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- [Zinc \(53370\)](#)
- [San Juan Creek](#)
 - [Alkalinity as CaCO3 \(49037\)](#)
 - [Aluminum \(48754\)](#)
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 - [Benthic-Macroinvertebrate Bioassessments \(40411\)](#)
 - [Bifenthrin \(48759\)](#)
 - [Cadmium \(48774\)](#)
 - [Chlordane \(48775\)](#)
 - [Chloride \(48791\)](#)
 - [Chlorpyrifos \(48862\)](#)
 - [Chromium \(48904\)](#)
 - [Copper \(48910\)](#)
 - [Cyfluthrin \(48912\)](#)
 - [Cyhalothrin, Lambda \(48917\)](#)
 - [Cypermethrin \(48919\)](#)
 - [DDD \(Dichlorodiphenyldichloroethane\) \(48466\)](#)
 - [DDT \(Dichlorodiphenyltrichloroethane\) | Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(49031\)](#)
 - [Deltamethrin \(48992\)](#)
 - [Diazinon \(43102\)](#)
 - [Dieldrin \(48925\)](#)
 - [Endrin \(48929\)](#)
 - [Esfenvalerate/Fenvalerate \(48933\)](#)
 - [Fenpropathrin \(48936\)](#)
 - [Fipronil \(48941\)](#)
 - [Fipronil Sulfide \(48944\)](#)
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 - [Iron \(48947\)](#)
 - [Lead \(48995\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(48946\)](#)
 - [Malathion \(48964\)](#)
 - [Manganese \(48966\)](#)
 - [Mercury \(49000\)](#)
 - [Methyl Parathion \(49003\)](#)
 - [Nickel \(49009\)](#)
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 - [Permethrin, total \(49035\)](#)
 - [Silver \(49036\)](#)
 - [Sulfates \(48969\)](#)
 - [Temperature, water \(48978\)](#)
 - [Total Dissolved Solids \(48982\)](#)
 - [Turbidity \(48986\)](#)
 - [Zinc \(48989\)](#)
 - [pH \(33410\)](#)
- [San Juan Creek \(mouth\)](#)

- [Selenium \(62982\)](#)
- [San Luis Rey River, Lower \(west of Interstate 15\)](#)
 - [Arsenic \(49040\)](#)
 - [Cadmium \(49051\)](#)
 - [Chlorpyrifos \(50703\)](#)
 - [Chromium \(50637\)](#)
 - [Copper \(50675\)](#)
 - [Cypermethrin \(50704\)](#)
 - [Deltamethrin \(50709\)](#)
 - [Diazinon \(50730\)](#)
 - [Esfenvalerate/Fenvalerate \(50739\)](#)
 - [Lead \(50701\)](#)
 - [Malathion \(50740\)](#)
 - [Nickel \(52069\)](#)
 - [Selenium \(37417\)](#)
 - [Temperature, water \(50741\)](#)
 - [Zinc \(52109\)](#)
- [San Luis Rey River, Upper \(east of Interstate 15\)](#)
 - [Ammonia \(51982\)](#)
 - [Arsenic \(52072\)](#)
 - [Bifenthrin \(50752\)](#)
 - [Cadmium \(49067\)](#)
 - [Chlorpyrifos \(50755\)](#)
 - [Chromium \(52077\)](#)
 - [Copper \(52090\)](#)
 - [Cypermethrin \(50772\)](#)
 - [Diazinon \(50774\)](#)
 - [Lead \(52100\)](#)
 - [Malathion \(50788\)](#)
 - [Nickel \(52103\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(51978\)](#)
 - [Nitrogen, Nitrite \(51981\)](#)
 - [Temperature, water \(50800\)](#)
 - [Zinc \(52107\)](#)
- [San Marcos Creek](#)
 - [Arsenic \(50055\)](#)
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 - [Cadmium \(50106\)](#)
 - [Chlordane \(50111\)](#)
 - [Chlorpyrifos \(50116\)](#)
 - [Chromium \(50125\)](#)
 - [Copper \(50133\)](#)
 - [Cyfluthrin \(50146\)](#)
 - [Cyhalothrin, Lambda \(50158\)](#)
 - [Cypermethrin \(50744\)](#)
 - [DDD \(Dichlorodiphenyldichloroethane\) \(50156\)](#)
 - [DDT \(Dichlorodiphenyltrichloroethane\) \(50157\)](#)
 - [Deltamethrin \(50160\)](#)
 - [Diazinon \(50161\)](#)
 - [Dieldrin \(50162\)](#)
 - [Endrin \(50163\)](#)
 - [Esfenvalerate/Fenvalerate \(50165\)](#)
 - [Fenpropathrin \(50166\)](#)
 - [Fipronil \(50168\)](#)
 - [Fipronil Sulfide \(50169\)](#)
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- [Lead \(50172\)](#)
 - o [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(50177\)](#)
 - o [Malathion \(50178\)](#)
 - o [Nickel \(50745\)](#)
 - o [Oxygen, Dissolved \(50746\)](#)
 - o [Permethrin, total \(50747\)](#)
 - o [Temperature, water \(50749\)](#)
 - o [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(50748\)](#)
 - o [Zinc \(50750\)](#)
 - o [pH \(50751\)](#)
- [San Marcos Creek, unnamed fork at Twin Oaks Valley Road](#)
 - o [Cadmium \(50188\)](#)
 - o [Chlorpyrifos \(50192\)](#)
 - o [Copper \(50193\)](#)
 - o [Diazinon \(50194\)](#)
 - o [Indicator Bacteria \(50191\)](#)
 - o [Lead \(50195\)](#)
 - o [Malathion \(50196\)](#)
 - o [Zinc \(50197\)](#)
- [San Marcos Lake](#)
 - o [Indicator Bacteria \(50511\)](#)
 - o [Lead \(50512\)](#)
 - o [Nickel \(50513\)](#)
 - o [Oxygen, Dissolved \(50514\)](#)
 - o [Zinc \(50515\)](#)
 - o [pH \(50516\)](#)
- [San Marcos, Lake, drain to central southeast fork of lake](#)
 - o [Cadmium \(50525\)](#)
 - o [Chlorpyrifos \(50526\)](#)
 - o [Copper \(50527\)](#)
 - o [Diazinon \(50547\)](#)
 - o [Indicator Bacteria \(50549\)](#)
 - o [Lead \(50553\)](#)
 - o [Malathion \(50554\)](#)
 - o [Zinc \(50555\)](#)
- [San Marcos, Lake, drain to central southwest fork of lake](#)
 - o [Cadmium \(50556\)](#)
 - o [Chlorpyrifos \(50557\)](#)
 - o [Diazinon \(50559\)](#)
 - o [Lead \(50561\)](#)
 - o [Malathion \(50562\)](#)
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- [San Mateo Creek \(San Diego County\)](#)
 - o [Alkalinity as CaCO3 \(52901\)](#)
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 - o [Arsenic \(52929\)](#)
 - o [Benthic Community Effects \(43123\)](#)
 - o [Bifenthrin \(52944\)](#)
 - o [Cadmium \(52945\)](#)
 - o [Chloride \(52975\)](#)
 - o [Chromium \(52977\)](#)
 - o [Copper \(52990\)](#)
 - o [Cyfluthrin \(52991\)](#)
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- [Cypermethrin \(52993\)](#)
- [Deltamethrin \(52994\)](#)
- [Esfenvalerate/Fenvalerate \(52995\)](#)
- [Fenpropathrin \(52996\)](#)
- [Iron \(52997\)](#)
- [Lead \(52998\)](#)
- [Manganese \(52999\)](#)
- [Mercury \(53000\)](#)
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- [Nitrogen, ammonia \(Total Ammonia\) \(53002\)](#)
- [Oxygen, Dissolved \(53003\)](#)
- [Permethrin, total \(53009\)](#)
- [Selenium \(53010\)](#)
- [Silver \(53011\)](#)
- [Sulfates \(53012\)](#)
- [Temperature, water \(53013\)](#)
- [Total Dissolved Solids \(53027\)](#)
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- [San Miguel Creek](#)
 - [Cadmium \(49087\)](#)
 - [Chlorpyrifos \(49093\)](#)
 - [Copper \(49094\)](#)
 - [Diazinon \(49097\)](#)
 - [Lead \(49095\)](#)
 - [Malathion \(49098\)](#)
 - [Zinc \(49096\)](#)

- [San Vicente Creek \(San Diego County\)](#)
 - [Cadmium \(49109\)](#)
 - [Chlorpyrifos \(49110\)](#)
 - [Copper \(49111\)](#)
 - [Diazinon \(49112\)](#)
 - [Lead \(49113\)](#)
 - [Malathion \(49114\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(49119\)](#)
 - [Nitrogen, Nitrite \(49121\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49120\)](#)
 - [Zinc \(49122\)](#)

- [San Vicente Creek \(San Diego County\), unnamed tributary at Arena Drive](#)
 - [Cadmium \(49123\)](#)
 - [Chlorpyrifos \(49124\)](#)
 - [Copper \(49125\)](#)
 - [Diazinon \(49126\)](#)
 - [Indicator Bacteria \(53446\)](#)
 - [Lead \(49131\)](#)
 - [Malathion \(49139\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(49140\)](#)
 - [Nitrogen, Nitrite \(49142\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(49141\)](#)
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- [San Vicente Reservoir](#)
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 - [Aldicarb \(48209\)](#)
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 - [Aluminum \(43108\)](#)
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 - [Arsenic \(36728\)](#)
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 - [Beryllium \(32823\)](#)
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 - [Cadmium \(44614\)](#)
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 - [Chloride \(43052\)](#)
 - [Chlorpyrifos \(48417\)](#)
 - [Chromium \(32824\)](#)
 - [Copper \(44615\)](#)
 - [Cyfluthrin \(48418\)](#)
 - [Cyhalothrin, Lambda \(48420\)](#)
 - [Cypermethrin \(48424\)](#)
 - [Deltamethrin \(48431\)](#)
 - [Diazinon \(48434\)](#)
 - [Endrin \(48231\)](#)
 - [Esfenvalerate/Fenvalerate \(48438\)](#)
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 - [Indicator Bacteria \(51174\)](#)
 - [Lead \(48448\)](#)
 - [Malathion \(48450\)](#)
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 - [Methiocarb \(51115\)](#)
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 - [Oxamyl \(Vydate\) \(51117\)](#)
 - [Oxygen, Dissolved \(51154\)](#)
 - [Pendimethalin \(51156\)](#)
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 - [Simazine \(51168\)](#)
 - [Specific Conductivity \(51167\)](#)
 - [Temperature, water \(51169\)](#)
 - [Thallium \(33864\)](#)
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- [Santa Margarita Lagoon](#)
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 - [Arsenic \(47990\)](#)
 - [Benzo\(a\)anthracene \(48004\)](#)
 - [Cadmium \(48011\)](#)
 - [Chlordane \(48012\)](#)
 - [Chromium \(48013\)](#)
 - [Chrysene \(C1-C4\) \(48016\)](#)
 - [Copper \(48110\)](#)
 - [Dibenz\[a,h\]anthracene \(48129\)](#)

- [Endrin \(48130\)](#)
- [Indicator Bacteria \(50566\)](#)
- [Lead \(48133\)](#)
- [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(48137\)](#)
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- [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(48140\)](#)
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- [Phenanthrene \(48144\)](#)
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- [Zinc \(48150\)](#)
- [Santa Margarita River \(Lower\)](#)
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 - [Arsenic \(47437\)](#)
 - [Benzo\(a\)anthracene \(47507\)](#)
 - [Bifenthrin \(47518\)](#)
 - [Cadmium \(47361\)](#)
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 - [Cyfluthrin \(47519\)](#)
 - [Cyhalothrin, Lambda \(47525\)](#)
 - [Cypermethrin \(47528\)](#)
 - [DDD \(Dichlorodiphenyldichloroethane\) \(47531\)](#)
 - [DDE \(Dichlorodiphenyldichloroethylene\) \(47532\)](#)
 - [DDT \(Dichlorodiphenyltrichloroethane\) \(47534\)](#)
 - [Deltamethrin \(47536\)](#)
 - [Diazinon \(47564\)](#)
 - [Dibenz\[a,h\]anthracene \(47537\)](#)
 - [Dieldrin \(47538\)](#)
 - [Endrin \(47543\)](#)
 - [Esfenvalerate/Fenvalerate \(47544\)](#)
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 - [Lead \(47434\)](#)
 - [Lindane/gamma Hexachlorocyclohexane \(gamma-HCH\) \(47552\)](#)
 - [Mercury \(33317\)](#)
 - [Methyl Parathion \(47546\)](#)
 - [Nickel \(47565\)](#)
 - [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(47567\)](#)
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 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(47558\)](#)
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 - [Permethrin, total \(47547\)](#)
 - [Phenanthrene \(47561\)](#)
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 - [Total DDT \(sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD\) \(47548\)](#)
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- [Santa Margarita River \(Upper\)](#)
 - [Alkalinity as CaCO₃ \(47930\)](#)
 - [Alkalinity as CaCO₃ | Ammonia | Manganese | Nickel | Orthophosphate | Total Kjeldahl Nitrogen \(TKN\) | Total Suspended Solids \(TSS\) \(44289\)](#)
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- [Arsenic \(47613\)](#)
- [Benthic Community Effects \(51181\)](#)
- [Bifenthrin \(47614\)](#)
- [Cadmium \(47616\)](#)
- [Chloride \(47618\)](#)
- [Chlorpyrifos \(47620\)](#)
- [Chromium \(47621\)](#)
- [Copper \(47629\)](#)
- [Cyfluthrin \(47578\)](#)
- [Cyhalothrin, Lambda \(47630\)](#)
- [Cypermethrin \(47631\)](#)
- [Deltamethrin \(47644\)](#)
- [Diazinon \(47645\)](#)
- [Esfenvalerate/Fenvalerate \(47646\)](#)
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- [Lead \(47659\)](#)
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- [Metals \(38589\)](#)
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- [Nitrate/Nitrite \(Nitrite + Nitrate as N\) \(47677\)](#)
- [Nitrogen, Nitrite \(47679\)](#)
- [Nitrogen, ammonia \(Total Ammonia\) \(47682\)](#)
- [Oxygen, Dissolved \(47931\)](#)
- [Permethrin, total \(47687\)](#)
- [Selenium \(47698\)](#)
- [Silver \(47702\)](#)
- [Specific Conductivity \(47933\)](#)
- [Sulfates \(47710\)](#)
- [Temperature, water \(47934\)](#)
- [Total Dissolved Solids \(47927\)](#)
- [Turbidity \(47935\)](#)
- [Zinc \(47711\)](#)
- [pH \(47771\)](#)

- [Santa Maria Creek](#)
 - [Ammonia \(51983\)](#)
 - [Cadmium \(49118\)](#)
 - [Chlorpyrifos \(49273\)](#)
 - [Copper \(49127\)](#)
 - [Diazinon \(49280\)](#)
 - [Indicator Bacteria \(51709\)](#)
 - [Lead \(49130\)](#)
 - [Malathion \(49282\)](#)
 - [Nitrogen, Nitrite \(51984\)](#)
 - [Zinc \(49269\)](#)

- [Santa Ysabel Creek \(below Sutherland Reservoir\)](#)
 - [Alkalinity as CaCO₃ \(49295\)](#)
 - [Aluminum \(49310\)](#)
 - [Ammonia \(Unionized\) \(51990\)](#)
 - [Arsenic \(49312\)](#)
 - [Benthic Community Effects \(51741\)](#)
 - [Bifenthrin \(49344\)](#)
 - [Cadmium \(49376\)](#)
 - [Chloride \(49421\)](#)
 - [Chromium \(49377\)](#)
 - [Copper \(49379\)](#)
 - [Cyfluthrin \(49345\)](#)
 - [Cyhalothrin, Lambda \(49346\)](#)
 - [Cypermethrin \(49347\)](#)

- [Deltamethrin \(49348\)](#)
- [Esfenvalerate/Fenvalerate \(49349\)](#)
- [Fenpropathrin \(49353\)](#)
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- [Paradise Creek, HSA 908.320](#)
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 - [Copper \(50558\)](#)
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- [Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek](#)
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 - [Trash \(49883\)](#)
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 - [Trash \(50047\)](#)

REGIONAL BOARD 9 - SAN DIEGO REGION

- [New or Revised Fact Sheets](#)

These lines of evidence and/or decisions, which were developed during the last listing cycle, are new or have been revised.

- **Original Fact Sheets**

These lines of evidence and/or decisions were developed during the last listing cycle.

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Regional Board 9

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 - [Manganese \(32810\)](#)
 - [Nitrogen \(33011\)](#)
 - [Phosphorus \(42357\)](#)
- [Aliso Creek](#)
 - [Nitrogen \(42917\)](#)
- [Alvarado Creek](#)
 - [Selenium \(43846\)](#)
- [Arroyo Trabuco Creek](#)
 - [Nitrogen \(42285\)](#)
 - [Phosphorus \(34172\)](#)

- [Barrett Lake](#)
 - [Color \(33584\)](#)
 - [Manganese \(33542\)](#)
 - [Perchlorate \(42336\)](#)
 - [Total Nitrogen as N \(45902\)](#)
 - [pH \(33940\)](#)
- [Buena Creek](#)
 - [DDT \(Dichlorodiphenyltrichloroethane\) \(33072\)](#)
- [Buena Vista Lagoon](#)
 - [Indicator Bacteria \(34484\)](#)
 - [Nutrients \(34498\)](#)
 - [Sedimentation/Siltation \(42423\)](#)
- [Chollas Creek](#)
 - [Nitrogen \(43346\)](#)
 - [Phosphorus \(44572\)](#)
 - [Trash \(43167\)](#)
- [Cloverdale Creek](#)
 - [Phosphorus \(34001\)](#)
- [Cottonwood Creek \(San Marcos Creek watershed\)](#)
 - [Selenium \(46059\)](#)
- [De Luz Creek](#)
 - [Iron \(46111\)](#)
 - [Manganese \(34599\)](#)
 - [Sulfates \(33683\)](#)
- [El Capitan Lake](#)
 - [Color \(33601\)](#)
 - [Manganese \(42774\)](#)
 - [Phosphorus \(44703\)](#)
 - [Total Nitrogen as N \(43926\)](#)
 - [pH \(32680\)](#)
- [Encinitas Creek](#)
 - [Toxicity \(43313\)](#)
- [English Canyon](#)
 - [Benzo\[b\]fluoranthene \(33516\)](#)
 - [Dieldrin \(33023\)](#)
- [Escondido Creek](#)
 - [Nitrogen \(43310\)](#)
- [Felicita Creek](#)
 - [Aluminum \(33247\)](#)
- [Forester Creek](#)
 - [Phosphorus \(44281\)](#)
 - [Selenium \(42648\)](#)
- [Green Valley Creek](#)

- [Chloride \(33338\)](#)
 - [Manganese \(33340\)](#)
 - [Pentachlorophenol \(PCP\) \(46271\)](#)
- [Guajome Lake](#)
 - [Eutrophic \(34647\)](#)
- [Hodges, Lake](#)
 - [Manganese \(32735\)](#)
 - [Mercury \(32549\)](#)
 - [Turbidity \(33094\)](#)
 - [pH \(33305\)](#)
- [Jamul Creek](#)
 - [Toxicity \(43270\)](#)
- [Keys Creek](#)
 - [Selenium \(43217\)](#)
- [Kit Carson Creek](#)
 - [Pentachlorophenol \(PCP\) \(33352\)](#)
- [Long Canyon Creek \(tributary to Murrieta Creek\)](#)
 - [Chlorpyrifos \(43219\)](#)
 - [Iron \(43326\)](#)
 - [Manganese \(43363\)](#)
- [Los Coches Creek](#)
 - [Selenium \(42782\)](#)
- [Los Penasquitos Creek](#)
 - [Indicator Bacteria \(43282\)](#)
 - [Nitrogen \(42783\)](#)
 - [Total Dissolved Solids \(32612\)](#)
- [Loveland Reservoir](#)
 - [Manganese \(33382\)](#)
 - [Oxygen, Dissolved \(33159\)](#)
 - [pH \(33463\)](#)
- [Mission Bay \(area at mouth of Rose Creek only\)](#)
 - [Eutrophic \(33706\)](#)
 - [Lead \(41989\)](#)
- [Mission Bay at Quivira Basin](#)
 - [Copper \(44024\)](#)
- [Morena Reservoir](#)
 - [Ammonia \(44098\)](#)
 - [Color \(33682\)](#)
 - [Manganese \(33445\)](#)
 - [Phosphorus \(42720\)](#)
 - [pH \(33491\)](#)
- [Moro Canyon Creek](#)

- [Selenium \(42852\)](#)
 - [Toxicity \(43527\)](#)
- [Murrieta Creek](#)
 - [Chlorpyrifos \(42375\)](#)
 - [Copper \(33307\)](#)
 - [Iron \(33420\)](#)
 - [Manganese \(33419\)](#)
 - [Nitrogen \(43555\)](#)
- [Oceanside Harbor](#)
 - [Copper \(44036\)](#)
- [Oso Creek \(at Mission Viejo Golf Course\)](#)
 - [Chloride \(34925\)](#)
 - [Sulfates \(33700\)](#)
 - [Total Dissolved Solids \(34850\)](#)
- [Oso Creek \(lower\)](#)
 - [Toxicity \(42685\)](#)
- [Otay Reservoir, Lower](#)
 - [Ammonia \(32559\)](#)
 - [Iron \(32878\)](#)
 - [Manganese \(32804\)](#)
 - [Nitrogen \(43345\)](#)
 - [pH \(32382\)](#)
- [Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty](#)
 - [Indicator Bacteria \(42675\)](#)
- [Paleta Creek](#)
 - [Copper \(43588\)](#)
 - [Lead \(41664\)](#)
- [Paradise Creek, HSA 908.320](#)
 - [Selenium \(44863\)](#)
- [Poggi Canyon Creek](#)
 - [Toxicity \(43633\)](#)
- [Poway Creek](#)
 - [Selenium \(43499\)](#)
 - [Toxicity \(44462\)](#)
- [Rainbow Creek](#)
 - [Sulfates \(36317\)](#)
 - [Total Dissolved Solids \(33806\)](#)
- [Redhawk Channel](#)
 - [Chlorpyrifos \(43085\)](#)
 - [Copper \(43600\)](#)
 - [Diazinon \(43668\)](#)
 - [Iron \(43204\)](#)
 - [Manganese \(43669\)](#)
 - [Nitrogen \(43644\)](#)

- [Phosphorus \(43113\)](#)
- [Total Dissolved Solids \(43114\)](#)
- [Rose Creek](#)
 - [Selenium \(36872\)](#)
- [San Diego Bay Shoreline, 32nd St San Diego Naval Station](#)
 - [Benthic Community Effects \(44918\)](#)
 - [Sediment Toxicity \(34113\)](#)
- [San Diego Bay Shoreline, Chula Vista Marina](#)
 - [Copper \(33346\)](#)
- [San Diego Bay Shoreline, Downtown Anchorage](#)
 - [Sediment Toxicity \(35141\)](#)
- [San Diego Bay Shoreline, North of 24th Street Marine Terminal](#)
 - [Benthic Community Effects \(34320\)](#)
 - [Sediment Toxicity \(35121\)](#)
- [San Diego Bay Shoreline, Seventh Street Channel](#)
 - [Benthic Community Effects \(34077\)](#)
 - [Sediment Toxicity \(33850\)](#)
- [San Diego Bay Shoreline, Vicinity of B St and Broadway Piers](#)
 - [Benthic Community Effects \(34654\)](#)
 - [Sediment Toxicity \(34709\)](#)
- [San Diego Bay Shoreline, at Americas Cup Harbor](#)
 - [Copper \(37281\)](#)
- [San Diego Bay Shoreline, at Coronado Cays](#)
 - [Copper \(33341\)](#)
- [San Diego Bay Shoreline, at Glorietta Bay](#)
 - [Copper \(33220\)](#)
- [San Diego Bay Shoreline, at Harbor Island \(East Basin\)](#)
 - [Copper \(33164\)](#)
- [San Diego Bay Shoreline, at Harbor Island \(West Basin\)](#)
 - [Copper \(44898\)](#)
- [San Diego Bay Shoreline, at Marriott Marina](#)
 - [Copper \(33165\)](#)
- [San Diego Bay Shoreline, near Chollas Creek](#)
 - [Sediment Toxicity \(35199\)](#)
- [San Diego Bay Shoreline, near Coronado Bridge](#)
 - [Sediment Toxicity \(35212\)](#)
- [San Diego Bay Shoreline, near Switzer Creek](#)
 - [Chlordane \(44920\)](#)

PAHs (Polycyclic Aromatic Hydrocarbons) (44697)

- [San Diego River \(Lower\)](#)
 - [Manganese \(44492\)](#)
 - [Phosphorus \(34467\)](#)
 - [Total Dissolved Solids \(43058\)](#)
- [San Dieguito River](#)
 - [Benthic Community Effects \(36832\)](#)
 - [Nitrogen \(43093\)](#)
 - [Phosphorus \(43138\)](#)
 - [Total Dissolved Solids \(43664\)](#)
- [San Elijo Lagoon](#)
 - [Eutrophic \(34554\)](#)
 - [Sedimentation/Siltation \(34744\)](#)
- [San Juan Creek](#)
 - [Nitrogen \(43657\)](#)
 - [Phosphorus \(32893\)](#)
- [San Juan Creek \(mouth\)](#)
 - [Cadmium \(62917\)](#)
 - [Copper \(62920\)](#)
 - [Nickel \(62927\)](#)
 - [Nitrogen, ammonia \(Total Ammonia\) \(62928\)](#)
- [San Luis Rey River, Lower \(west of Interstate 15\)](#)
 - [Chloride \(34482\)](#)
 - [Nitrogen \(43658\)](#)
 - [Phosphorus \(37416\)](#)
 - [Total Dissolved Solids \(34548\)](#)
- [San Luis Rey River, Upper \(east of Interstate 15\)](#)
 - [Phosphorus \(35149\)](#)
 - [Total Nitrogen as N \(35862\)](#)
- [San Marcos Creek](#)
 - [Phosphorus \(33514\)](#)
 - [Selenium \(43708\)](#)
- [San Marcos Lake](#)
 - [Nutrients \(32745\)](#)
- [San Mateo Creek \(San Diego County\)](#)
 - [Invasive Species \(62966\)](#)
- [San Vicente Creek \(San Diego County\)](#)
 - [Total Nitrogen as N \(44543\)](#)
- [San Vicente Reservoir](#)
 - [Chloride \(43115\)](#)
 - [Sulfates \(44819\)](#)
- [Santa Gertrudis Creek](#)
 - [Chlorpyrifos \(37136\)](#)

- [Copper \(43071\)](#)
 - [Iron \(43679\)](#)
 - [Manganese \(44195\)](#)
 - [Phosphorus \(43680\)](#)
- [Santa Margarita River \(Lower\)](#)
 - [Phosphorus \(43390\)](#)
- [Santa Ysabel Creek \(above Sutherland Reservoir\)](#)
 - [Toxicity \(37145\)](#)
- [Soledad Canyon](#)
 - [Selenium \(44274\)](#)
- [Sutherland Reservoir](#)
 - [Iron \(44516\)](#)
 - [Manganese \(33050\)](#)
 - [pH \(33064\)](#)
- [Sweetwater Reservoir](#)
 - [Oxygen, Dissolved \(33235\)](#)
- [Sweetwater River, Lower \(below Sweetwater Reservoir\)](#)
 - [Nitrogen \(43867\)](#)
 - [Phosphorus \(43923\)](#)
 - [Total Dissolved Solids \(44400\)](#)
- [Switzer Creek](#)
 - [Copper \(43031\)](#)
 - [Lead \(43239\)](#)
 - [Zinc \(43294\)](#)
- [Tecate Creek](#)
 - [Selenium \(43218\)](#)
- [Tecolote Creek](#)
 - [Nitrogen \(38167\)](#)
 - [Phosphorus \(43252\)](#)
 - [Turbidity \(44909\)](#)
- [Telegraph Canyon Creek](#)
 - [Selenium \(32596\)](#)
- [Temecula Creek](#)
 - [Chlorpyrifos \(43283\)](#)
 - [Copper \(42511\)](#)
 - [Total Dissolved Solids \(33302\)](#)
 - [Toxicity \(42672\)](#)
- [Tijuana River](#)
 - [Eutrophic \(40562\)](#)
 - [Low Dissolved Oxygen \(44569\)](#)
 - [Pesticides \(43166\)](#)
 - [Phosphorus \(43333\)](#)
 - [Sedimentation/Siltation \(43580\)](#)
 - [Solids \(34466\)](#)

- [Surfactants \(MBAS\) \(42793\)](#)
- [Synthetic Organics \(43320\)](#)
- [Total Nitrogen as N \(43581\)](#)
- [Trace Elements \(44587\)](#)
- [Trash \(34451\)](#)
- [Tijuana River Estuary](#)
 - [Eutrophic \(34508\)](#)
 - [Nickel \(33828\)](#)
 - [Pesticides \(34064\)](#)
 - [Thallium \(34079\)](#)
 - [Trash \(33705\)](#)
 - [Turbidity \(33667\)](#)
- [Warm Springs Creek \(Riverside County\)](#)
 - [Chlorpyrifos \(44683\)](#)
 - [Iron \(42738\)](#)
 - [Manganese \(44590\)](#)
 - [Nitrogen \(43143\)](#)
 - [Phosphorus \(32587\)](#)

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

Regional Board 9

- [Aliso Creek \(mouth\)](#)
 - [Indicator Bacteria \(34761\)](#)
- [Chollas Creek](#)
 - [Indicator Bacteria \(34499\)](#)
- [San Diego Bay, Shelter Island Yacht Basin](#)
 - [Copper, Dissolved \(35184\)](#)
- [San Juan Creek \(mouth\)](#)
 - [Indicator Bacteria \(34549\)](#)

List on 303(d) list (being addressed by action other than TMDL)

Regional Board 9

- [San Diego Bay Shoreline, between Sampson and 28th Streets](#)
 - [Copper \(34109\)](#)
 - [Mercury \(34200\)](#)
 - [PAHs \(Polycyclic Aromatic Hydrocarbons\) \(34260\)](#)
 - [PCBs \(Polychlorinated biphenyls\) \(41722\)](#)
 - [Zinc \(35139\)](#)